

Electric Pressure Fryer

MODELS FKM, FKM-F, & FKM-FC

SERVICE MANUAL

Serial Numbers 121836 and higher



Warranty Information

LIMITED ONE YEAR WARRANTY

BKI (The "Company") warrants to the original purchaser/user, that at time of shipment from the Company factory, this equipment will be free from defect in materials and workmanship. Written notice of a claim under this Warranty must be given within **ONE YEAR AND THREE MONTHS** from date of shipment from the factory. Defective conditions caused by abnormal use or misuse, lack of maintenance, damage by third parties, alterations by unauthorized personnel, acts of God, failure to follow installation instructions or any other events beyond the control of the company will **NOT** be covered under Warranty. The obligation of the Company under this Warranty shall be limited to repairing or replacing (at the option of the company) any part which is defective in reasonable opinion of the Company. The user will have the responsibility and expense of removing and returning the defective part to the Company as well as the cost of reinstalling the replacement or repaired part.

IN NO EVENT SHALL THE COMPANY BE LIABLE FOR LOSS OF USE, LOSS OF REVENUE OR LOSS OF PRODUCT OR PROFIT OR FOR INDIRECT OR CONSEQUENTIAL DAMAGES INCLUDING BUT NOT LIMITED TO, FOOD SPOILAGE OR PRODUCT LOSS. WARRANTY DOES NOT COVER GLASS BREAKAGE. THE ABOVE WARRANTY IS EXCLUSIVE AND ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, ARE EXCLUDED INCLUDING THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. THIS WARRANTY SHALL APPLY ONLY WITHIN THE CONTINENTAL UNITED STATES, ITS TERRITORIES, AND POSSESSIONS AND IN CANADA.

LIMITED NINETY DAY LABOR WARRANTY

All labor necessary to repair or replace factory defective parts will be performed, without charge, to the end user, by service personnel of a **BKI** Authorized Distributor during the first ninety days after the date of installation of the new equipment.

Replacement parts: Any appliance replacement part, except lamps and fuses, which proves to be defective in material or workmanship within 90 days from date of original installation will be repaired or replaced without charge F.O.B. Factory, Simpsonville, S.C. or F.O.B. authorized distributor.

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Introduction

The FKM Pressure Fryer is compact, attractive and functional in design. It is constructed of a stainless steel fryer pot for cleaning ease. Exclusive BKI patented features and safety devices offer flexibility, efficiency and reliability plus **PERFECTION IN PRESSURE FRYING!**

The BKI name and trademark on this unit assures you of the finest in design and engineering -- that it has been built with care and dedication -- using the best materials available. Attention to the operating instructions regarding proper installation, operation, and maintenance will result in long lasting dependability to insure the highest profitable return on your investment.

NOTICE

PLEASE READ THIS ENTIRE MANUAL BEFORE OPERATING THE UNIT. If you have any questions, please contact your BKI Distributor. If they are unable to answer your questions, contact the BKI Technical Service Department, toll free: 1-800-927-6887. Outside the U.S., call 1-864-963-3471.

Safety Precautions

Always follow recommended safety precautions listed in this manual. Below is the safety alert symbol. When you see this symbol on your equipment, be alert to the potential for personal injury or property damage.



Safety Signs and Messages

The following Safety signs and messages are placed in this manual to provide instructions and identify specific areas where potential hazards exist and special precautions should be taken. Know and understand the meaning of these instructions, signs, and messages. Damage to the equipment, death or serious injury to you or other persons may result if these messages are not followed.

DANGER

This message indicates an imminently hazardous situation which, if not avoided, will result in death or serious injury.

WARNING

This message indicates a potentially hazardous situation, which, if not avoided, could result in death or serious injury.

CAUTION

This message indicates a potentially hazardous situation, which, if not avoided, may result in minor or moderate injury. It may also be used to alert against unsafe practices.

NOTICE

This message is used when special information, instructions or identification are required relating to procedures, equipment, tools, capacities and other special data.

Specific Precautions



Lids for FKM Pressure Fryers manufactured prior to May 27, 1980 (or units with serial numbers lower than 3613) could be manually opened while under pressure resulting in serious injury or death. If you have one of these units, please contact the BKI Technical Services Department toll-free at 1-800-927-6887 for urgent update information.

Safe Work Practices



Noncombustible Floors Only

Make sure your floor is noncombustible. Do not operate your fryer on floors that are wood, carpeted or have rubber mats.

- Placing your fryer on a combustible floor could cause a fire. Serious injury could result.
- Examples of noncombustible floors where you can safely place your fryer are concrete, tile, and ceramic.



Keep The Area Around Your Fryer Uncluttered

Make sure to keep the area around your fryer clear of any obstacles.

Serious injury can occur if you trip or fall near the fryer. You could be burned by hot shortening that splashes out of the fryer or by falling against the hot metal of the fryer.



Keep The Floor Around Your Fryer Clean Of Shortening

Make sure to keep the floor around your fryer clean of shortening and other liquids.

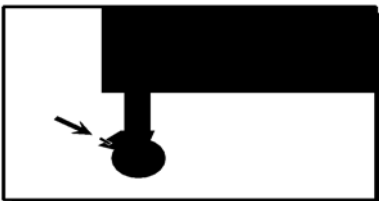
Serious injury can occur if you slip near your fryer. You could be burned by hot shortening that splashes out of the fryer or by falling against the hot metal of the fryer.



Keep The Lid Closed When The Fryer Is Not In Use

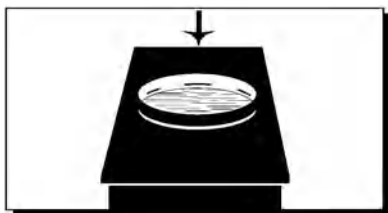
Hot shortening can splash if someone moves the fryer or bumps into it. Serious injury can occur if hot shortening splashes out of the fryer.

Do not lean, sit or stand on the fryer or perform any maintenance or cleaning duties while the fryer or the shortening is hot. You could be burned.



Keep The Casters Locked

To avoid spilling shortening, keep the casters locked. If any shortening spills near your fryer, clean it up immediately.

**Do Not Overfill The Fryer With Shortening**

Hot shortening and steam may escape and burn you if you put too much shortening in the fryer. Fill the fryer to approximately one inch below the fill marks that are inside the fryer pot. Heat the shortening. If needed, carefully add more shortening to bring the level to the fill marks.

**Do Not Let Any Water Get Into The Fryer**

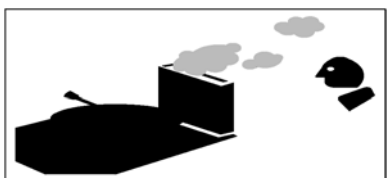
Always remove excess moisture from food before placing it into the fryer basket. Water will cause the hot shortening to spatter. You could be burned.

**Do Not Overload The Basket With Food**

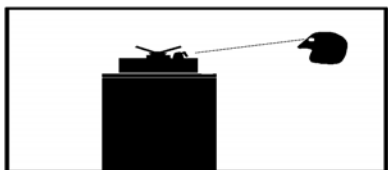
Hot shortening and steam may escape and burn you if you place too much food in the basket.

**Always Make Sure The Lid Hook Is Latched When Closing The Fryer**

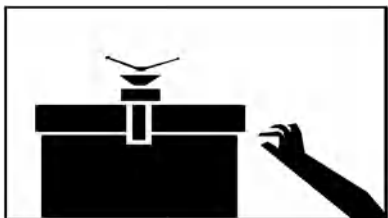
To make sure the lid hook is latched properly, press down the lid until the hook snaps shut. Hot shortening and steam can escape if the lid hook is not latched properly. You could be burned.

**Keep Away From The Vent**

Hot steam escapes from the vent continuously when you are using your fryer. You could be burned if you get too close to the vent.

**Seal The Safety Valve Properly**

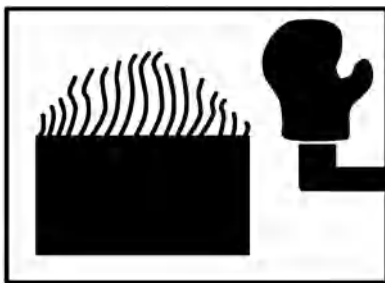
To seal the safety valve, lift the arm on the side of the valve. Then release it. The valve should snap closed. Hot steam can escape from the valve and you could be burned if you do not seal the valve properly.

**Always Tighten The Spin Handle When Closing The Fryer**

Hot shortening and steam can escape if you do not tighten the spin handle properly. You could be burned. Line up the orange knobs on the fryer lid handle and the front hook when tightening.

Do Not Over-Tighten The Spin Handle

You could damage the fryer.

**Wear Safe Clothing Appropriate To Your Job**

Always wear your insulated mitts when handling the fryer basket or touch any hot metal surfaces. You received a pair of insulated mitts with your fryer. If you lose or damage your mitts, you can buy new ones at your local restaurant equipment supply store or from your local **BKI** Distributor.

Always wear non-skid shoes when working around the fryer or any other equipment that uses shortening. Never wear loose clothing such as neckties or scarves while operating your fryer. Keep loose hair tied back or in a hair net while operating your fryer.

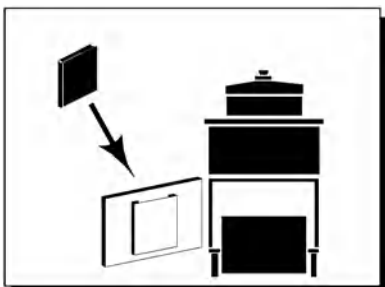
Always wear appropriate personal protection equipment during the filtering process to guard against possible injury from hot oil.

Always wear appropriate personal protection equipment during the boil-out process to guard against possible injury from hot cleaning solution.

**Never Loosen The Spin Handle Until The Pressure Gauge Is At Zero**

Steam may escape suddenly if you loosen the spin handle before the gauge is at zero. If steam escapes suddenly, you could be burned.

After the pressure gauge is at zero, wait 5 seconds. Then loosen the spin handle slowly to open the lid of the fryer. By doing this, the steam will escape slowly and there is less change of being burned. Always use extreme caution when working around the fryer with the lid open.

**Keep this manual with the Equipment**

This manual is an important part of your equipment. Always keep it near for easy access.

If you need to replace this manual, contact:

BKI

Technical Services Department
P.O. Box 80400
Simpsonville, S.C. 29680-0400
Or call toll free: 1-800-927-6887
Outside the U.S., call 864-963-3471

**Protect Children**

Keep children away from this equipment. Children may not understand that this equipment is dangerous for them and others.

NEVER allow children to play near or operate your equipment.

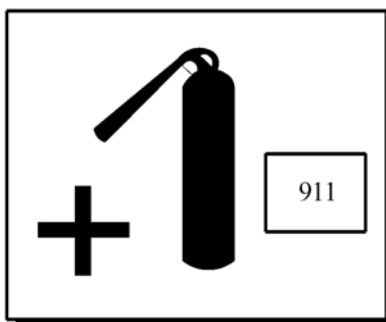
**Keep Safety Labels Clean and in Good Condition**

Do not remove or cover any safety labels on your equipment. Keep all safety labels clean and in good condition. Replace any damaged or missing safety labels. Refer to the Safety Labels section for illustration and location of safety labels on this unit.

If you need a new safety label, obtain the number of the specific label illustrated on page 7, then contact:

BKI

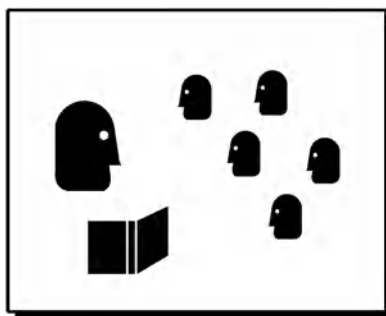
Technical Services Department
P.O. Box 80400
Simpsonville, S.C. 29680-0400
Or call toll free: 1-800-927-6887
Outside the U.S., call 864-963-3471

**Be Prepared for Emergencies**

Be prepared for fires, injuries, or other emergencies.

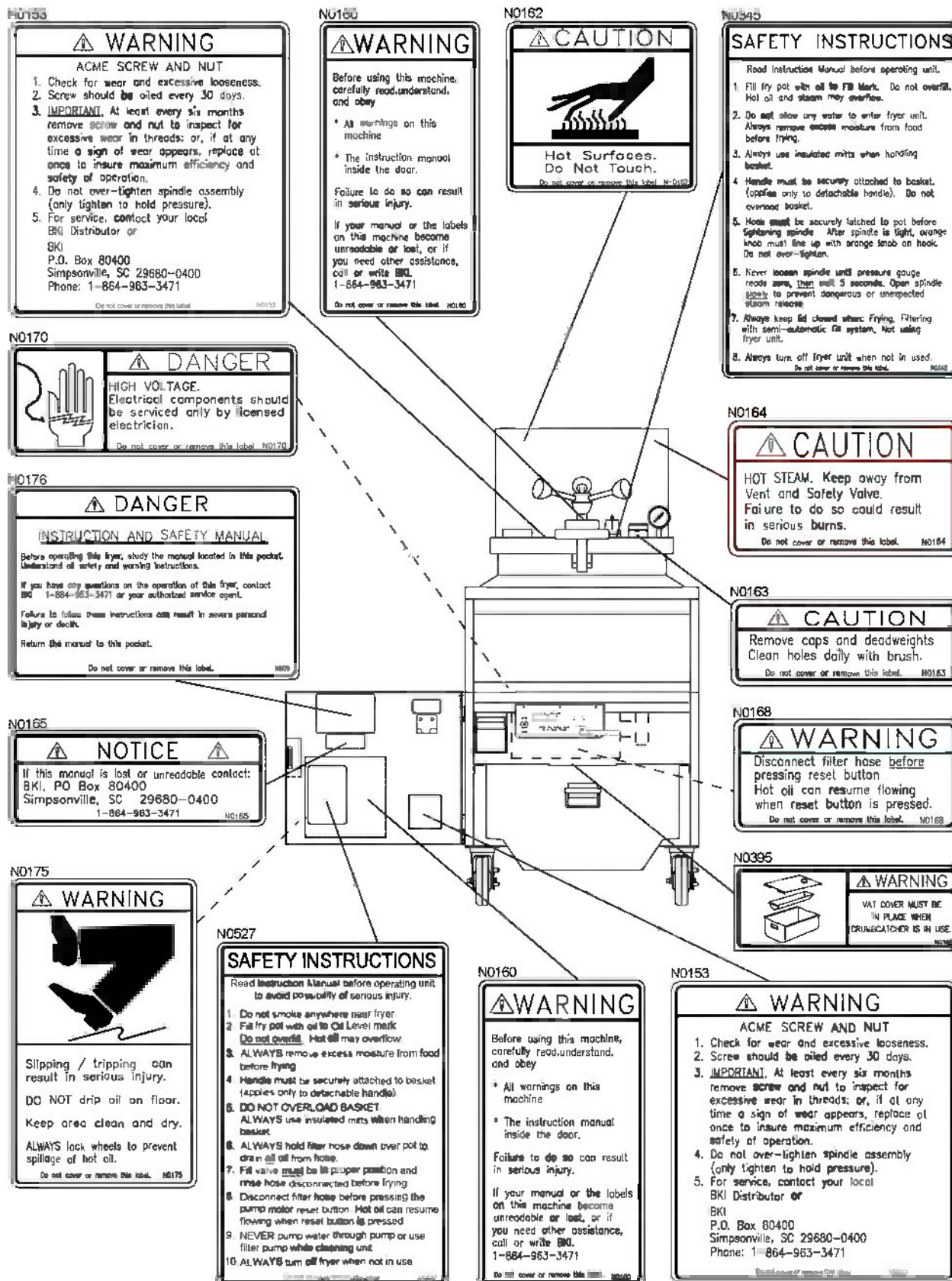
Keep a first aid kit and a fire extinguisher near the equipment. You must use a 40-pound Type BC fire extinguisher and keep it within 25 feet of your equipment.

Keep emergency numbers for doctors, ambulance services, hospitals, and the fire department near your telephone.

**Know your responsibilities as an Employer**

- Make certain your employees know how to operate the equipment.
- Make certain your employees are aware of the safety precautions on the equipment and in this manual.
- Make certain that you have thoroughly trained your employees about operating the equipment safely.
- Make certain the equipment is in proper working condition. If you make unauthorized modifications to the equipment, you will reduce the function and safety of the equipment.

Safety Labels



Installation

⚠ WARNING

Serious injury, equipment damage or death could result if attempting to install this fryer yourself. Ensure that an authorized BKI service agent installs the fryer.

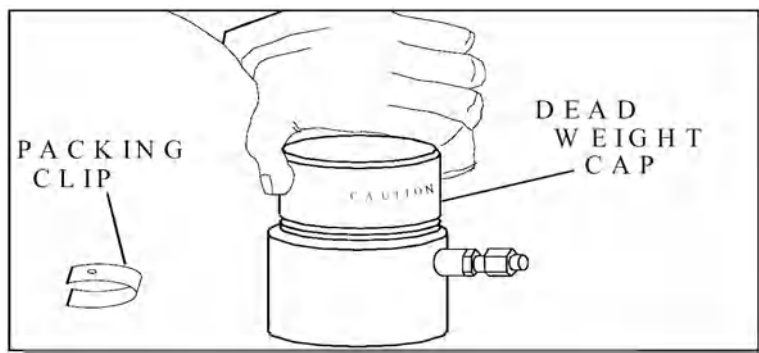
Unpacking and Handling

It is the owners' responsibility to file all freight claims with the delivering truck line. Inspect all cartons and crates for damage as soon as they arrive. If damage to cartons or crates is found, or if a shortage is found, note this on the bill of lading (all copies) prior to signing.

If damage is found when the equipment is opened, immediately call the delivering truck line and follow up the call with a written report indicating concealed damage to your shipment. Ask for an immediate inspection of your concealed damage item. Packaging material **MUST** be retained to show the inspector from the truck line.

Assembly and Mounting

1. Remove the shipping packing clip from underneath the dead weight cap and discard.



2. Replace the dead weight and cover.
3. If your fryer has casters, lock them so the fryer does not move.
4. Clean the fryer pot before filling with shortening.
5. Place the DRAIN handle in the CLOSED position

Wiring

⚠ WARNING

Electrocution, equipment failure or property damage could result if an unlicensed electrician performs the electrical installation. Ensure that a licensed electrician performs the electrical installation.

The fryer, when installed by an authorized BKI service agent, must be wired in accordance with local codes, or in the absence of local codes, with the National Electrical Code, ANSINFP 70-2002. You can obtain this code from:

The National Fire Protection Association
Batterymarch Park
Quincy, MA 02269

Initial Test and Adjustment

1. Fill pot with shortening to about one inch below the mark.

NOTICE

Use only high-quality shortening that has low moisture content, a high smoke point and no additives.

CAUTION

Overfilling the fryer pot with shortening could lead to serious injury. Ensure that the fryer pot is filled with shortening only to the fill mark when shortening is hot. Do not use any shortening other than what is specified in this manual and do not overfill the fryer pot.



2. Place the **FILTER/OFF/FRY** switch to the **FRY** position. The shortening should begin to heat and begin to reach the fill mark inside the pot. Add more shortening as required to reach the fill mark. Refer to the troubleshooting section if this does not occur.

Maintenance



Failure to comply with the maintenance below could result in a serious accident.

Do not over-tighten the spindle assembly. (Only tighten to hold pressure.)

Your fryer will need periodic maintenance and servicing. We strongly suggest that you use only a service company that is authorized by BKI to do this work.

Scheduled Maintenance

Use the following table to help manage scheduled maintenance activities.

FREQUENCY	PERFORMED BY	PART	ACTIVITY
Each Fry Cycle	User	Pressure Gauge	Check for proper display of cooking vat pressure. Contact authorized BKI service agent if adjustment or replacement is required.
	User	Lid Gasket	Check for unusual wear such as cracks and deformation, and pressure leaks. Contact authorized BKI service agent if adjustment or replacement is required.
Daily	User	Dead Weight Assembly	Clean weight and orifices daily and check for wear.
	User	Filter Pad	Replace filter pad. Refer to the procedure in this manual.
	User	Condensation Pan	Remove and drain.
	User	Filter system	Filter the shortening using the procedure in this manual.
Weekly	User	Safety Pop Valve	Check for release of pressure and proper seal. Refer to the procedure in this manual.
	User	Fryer Pot	Perform the boil-out procedure in this manual.
Every 6 Months	Authorized BKI service agent	Acme Screw and Nut	Check for wear on the threads.
	Authorized BKI service agent	Solenoid Valve	Check that the valve is holding and releasing pressure when the timer or computer activates it.
	Authorized BKI service agent	Hook, Catch, Spring	Check for wear and ease of operation.
	Authorized BKI service agent	Connections, Fittings	Check for leakage while oil is pumping.

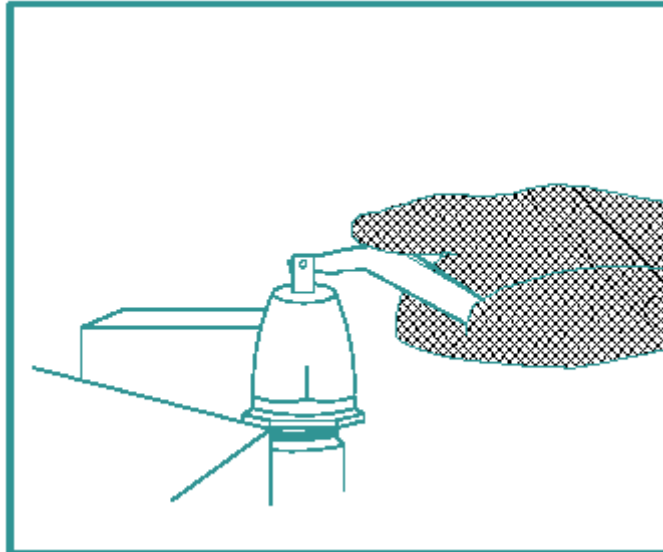
Safety Pop Valve Procedure

The safety pop valve should be blown under pressure periodically to prevent the seat from sticking.



Failure to use the insulated mitts will result in injury. Always use the insulated mitts when handling the arm on the safety valve.

1. After the pressure is up during a cooking cycle, use the insulated glove to lift the arm on the edge of the safety valve and let some steam escape. This will clean the valve.



2. Release the lever on the valve, and let it slam shut to seal the valve.

Filtering Procedure

Breaded foods require frequent filtering. An excess amount of breading left in the fryer pot will reduce the life of the shortening. We recommend the shortening be filtered after every three frying cycle loads. When the shortening starts to show signs of foaming and has a bad taste, do not use it. The fryer pot should be cleaned before refilling with new shortening. Best results for filtering are obtained while the shortening is hot. You should filter at the end of every business day. You should also remove and drain the condensation pan daily.

WARNING

Always wear appropriate personal protection equipment during the filtering process to guard against possible injury from hot oil.

FKM-F and FKM-FC

1. Set the **FILTER/OFF/FRY** switch to **OFF**.
2. Remove the fryer basket.
3. Make certain that the filter pad is clean and not torn.

IMPORTANT: Make certain the vat cover is properly positioned underneath the drain valve. Also make certain the filter vat and filter screen is under the main drain valve before starting the filtering process.

4. Move the DRAIN handle slowly to the OPEN position so that the shortening starts to flow evenly. This is to prevent excessive splashing of hot shortening.
5. When the pot is empty, place the DRAIN handle in the CLOSED position.

To refill the pot automatically, use the steps below:

WARNING

Hot shortening may splash out of the pot causing severe injury when filling the pot if the lid is not closed. To prevent shortening splashes, close the lid before filling.

- Close the lid to prevent shortening splashes.
- Place the FILL handle to the THRU POT position.
- Position the **FILTER/OFF/FRY** switch to **FILTER** and shortening will automatically pump into the pot.
- After 1 minute carefully open the lid to check the level of the shortening.
- Let the filter continue to pump the shortening until the fill mark in the fryer pot is reached or until air starts bubbling through the shortening.
- As soon as air is seen in the shortening, first place the FILL handle to the THRU HOSE position then position the **FILTER/OFF/FRY** switch to **OFF** to prevent shortening degradation and prevent the filter pump and lines from filling up with shortening.
- Add new shortening if the fill mark has not been reached.

To refill the pot through the rinse hose, use the steps below:

- Make certain that the rinse hose is connected to rinse hose connector.
- Holding the hose by the handle, place hose nozzle inside the pot.

⚠ WARNING

Hot shortening may splash out of the pot causing severe injury when filling the pot if the lid is not held down over the hose nozzle. To prevent shortening splashes, hold the lid down over the hose nozzle.

- Hold the lid down over the hose nozzle to prevent shortening splashes.
- Position the FILL lever in the THRU HOSE position.
- Position the **FILTER/OFF/FRY** switch to **FILTER** and shortening will automatically pump into the pot.
- After 1 minute, hold the hose by the handle and carefully raise the lid to check the level of the shortening.
- Let the filter continue to pump the shortening until the fill mark in the fryer pot is reached or until air starts bubbling through the shortening.
- As soon as air is seen in the shortening, position the **FILTER/OFF/FRY** switch to **OFF** to prevent shortening degradation.
- Add new shortening if the fill mark has not been reached.

FKM

1. Set the **FILTER/OFF/FRY** switch to **OFF**.
2. Remove the fryer basket.
3. Make certain that the FKF filter unit or portable filter unit filter pad is clean and not torn.
4. Position the FKF filter unit or portable filter unit under the main drain valve and make sure it's filter screen is in place.
5. Ensure that the FKF filter unit or portable filter unit is powered.
6. Move the DRAIN handle slowly to the OPEN position until the shortening starts to flow evenly. This will prevent excessive splashing of hot shortening.
7. When the pot is empty, place the DRAIN handle in the CLOSED position.

To refill the pot through the drain valve, use the steps below:

- Make certain that the braided hose (located on the drain valve) is connected to it's mating part on the FKF filter unit or portable filter unit.

⚠ WARNING

Hot shortening may splash out of the pot causing severe injury when filling the pot if the lid is not closed. To prevent shortening splashes, close the lid before filling.

- Close the lid to prevent shortening splashes.

- Position the **FILTER/OFF/FRY** switch to **FILTER** and shortening will automatically pump into the pot.
- After 1 minute carefully open the lid to check the level of the shortening.
- Let the filter continue to pump the shortening until the fill mark in the fryer pot is reached or until air starts bubbling through the shortening.
- As soon as air is seen in the shortening, position the **FILTER/OFF/FRY** switch to **OFF** to prevent shortening degradation and prevent the filter pump and lines from filling up with shortening.
- Add new shortening if the fill mark has not been reached.

To refill the pot through the rinse hose, use the steps below:

- Make certain that the rinse hose is connected to it's mating part on the FKF filter unit or portable filter unit.
- Holding the hose by the handle, place hose nozzle inside the pot.

⚠ WARNING

Hot shortening may splash out of the pot causing severe injury when filling the pot if the lid is not held down over the hose nozzle. To prevent shortening splashes, hold the lid down over the hose nozzle.

- Hold the lid down over the hose nozzle to prevent shortening splashes.
- Position the **FILTER/OFF/FRY** switch to **FILTER** and shortening will automatically pump into the pot.
- After 1 minute, hold the hose by the handle and carefully raise the lid to check the level of the shortening.
- Let the filter continue to pump the shortening until the fill mark in the fryer pot is reached or until air starts bubbling through the shortening.
- As soon as air is seen in the shortening, position the **FILTER/OFF/FRY** switch to **OFF** to prevent shortening degradation.
- Add new shortening if the fill mark has not been reached.

Boil-Out Procedure

Boil-outs remove microscopic particles of carbon that build up on the walls of the fryer pot. To avoid eventual carbon build-up, off flavors, and shortening breakdown, boil-outs should be done once a week on each fryer following these procedures.

⚠ WARNING

Always wear appropriate personal protection equipment during the boil-out process to guard against possible injury from hot cleaning solution.

1. Position the **FILTER/OFF/FRY** switch to **OFF**.
2. Drain the clean shortening into an adequate storage container. (**Allow the shortening to cool to room temperature before attempting storage.**)

3. CLOSE the drain and fill the fryer pot with **HOT** water to the shortening level fill mark. Do not overfill by allowing the water level higher than the fill mark.
4. Add ½ cup (4 ounces) of **BKI** cleaner.
5. Wash down the inside of the pot and lid with the pot brush to loosen the sediment.
6. Set the temperature of the solution as follows:
 - **For an FKM or FKM-F** – Position the **FILTER/OFF/FRY** switch to **ON**. Set the thermostat to a temperature of 190° F.
 - **For an FKM-FC** – Position the **FILTER/OFF/FRY** switch to **ON**. Press PROG (program), type 1733, and press ENTER. The fryer pot will heat to a temperature of 190° F during the CLEAN cycle to allow the CLEAN function to be performed. NOTE: The fryer pot must be below 255° F to enter the CLEAN mode.
7. Bring the cleaning solution to a rolling boil and maintain the boil for 5 minutes.
8. Place the **FILTER/OFF/FRY** switch to **OFF**.
9. Scrub the inside of the fryer pot and inside of the lid again.
10. **Before draining the cleaning solution**, remove the filter bag, screen and pipe connections from the filter vat. This must be done before draining the cleaning solution. **NEVER** pump water or detergent through the filter system.
11. After 15 minutes, slowly open the drain valve. Drain the solution into the filter vat and discard.
12. Rinse the pot with hot water, using the pot brush to remove remaining sediment, drain and discard.
13. Close the drain and refill the fryer pot with hot water to the proper level.
14. Add approximately 4 to 6 ounces of distilled (white) vinegar to develop a neutralizing solution. Stir the solution briefly. Leave in the pot for three to five minutes and discard. **NOTE: Foaming of shortening after boil-outs is caused by failure to follow proper neutralizing procedures.**
15. Repeat steps 12 through 14 as needed to remove all traces of cleaning solution.
16. Rinse the pot again with Cool water, drain and discard.

CAUTION

Damage to the fryer could result if the fryer pot is not completely dry before filling with shortening. Refill the fryer pot with shortening **ONLY** when it is completely dry.

17. Dry the fryer pot, lid, and filter vat **COMPLETELY**.
18. Close the main drain and fill with new shortening to the proper level.

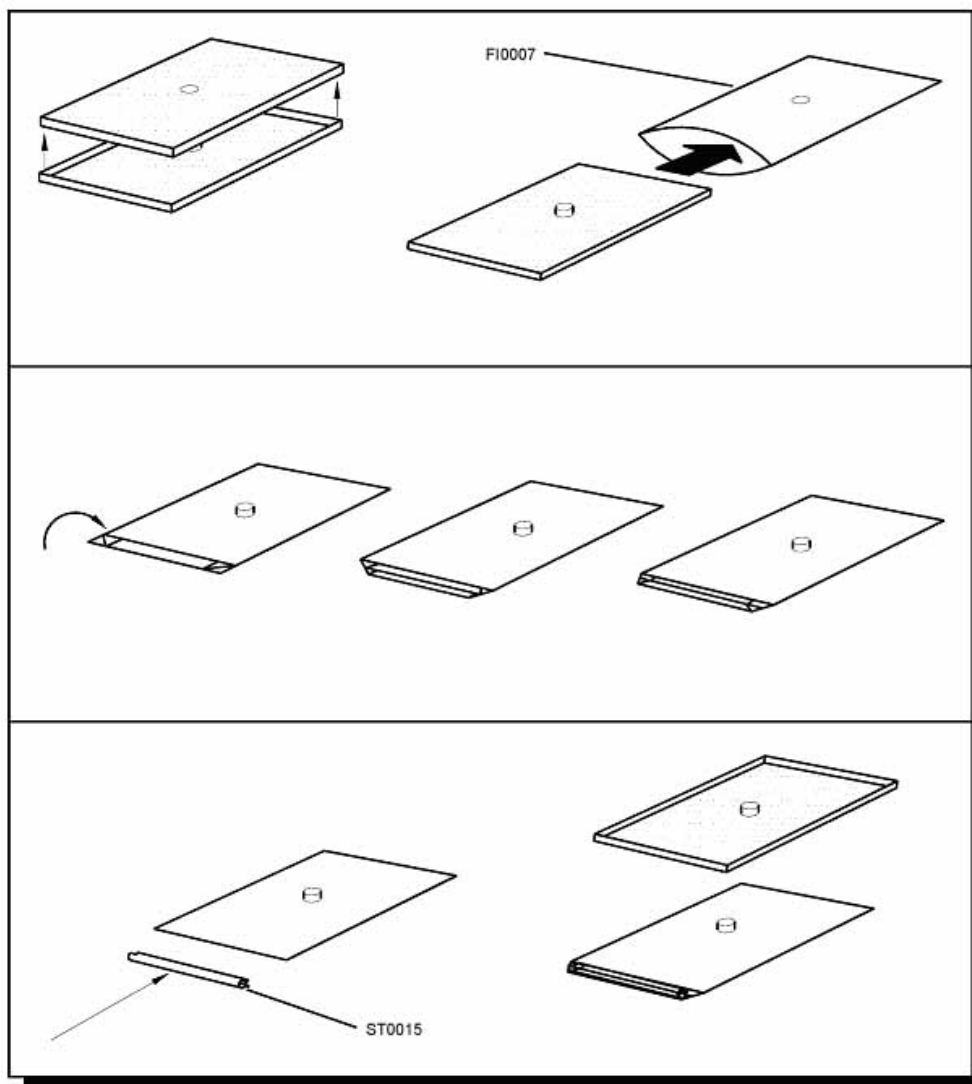
Filter Pad Replacement

The filter pad must be replaced daily. If the shortening has a milky color when it is pumped into the pot, the filter pad should be replaced immediately.

CAUTION

If the filter pad is not properly closed, breading crumbs will get through the pad opening and clog the pump. Ensure that the filter pad is properly closed upon replacement.

1. Place the filter screen inside the filter pad.
2. Fold the end of the pad and seal with the bag clip.



Troubleshooting

Refer to the table below for troubleshooting information.

Problem	Cause	Possible Solution
Pressure Loss or Not Releasing Pressure	Dead Weight Valve Leaking	Clean the weight and orifice. If problems persist, contact an authorized BKI service agent for corrective action.
	Lid Gasket Leaking	Contact an authorized BKI service agent for corrective action.
	Solenoid Valve Leaking or Stuck	After a period of time, it is possible that the valve seat and/or plunger may stick or wear. Activate the valve by starting a cook cycle. You should hear a solid metallic CLICK sound from the solenoid valve. If you should hear no sound (or a slow BUZZING CLICK), contact an authorized BKI service agent for corrective action.
	Safety Valve not seating	Contact an authorized BKI service agent for corrective action.
Shortening Heating Too Slowly	Low voltage or improper voltage	Contact an authorized BKI service agent for corrective action.
	Bad thermostat or loose wires	Contact an authorized BKI service agent for corrective action.
	Weak heating elements or heating elements breaking down	Contact an authorized BKI service agent for corrective action.
	Coil on contactor is bad	Contact an authorized BKI service agent for corrective action.
	Breeding build-up on heating elements	Clean heating elements. If problems persist, contact an authorized BKI service agent for corrective action.
Filter System Not Working	Uncertain	Press the reset button on end of pump and hi-limit reset button under control panel. If problems persist, contact an authorized BKI service agent for corrective action.
	Connections not tight	Tighten the connections. If problems persist, contact an authorized BKI service agent for corrective action.

Electric Pressure Fryer

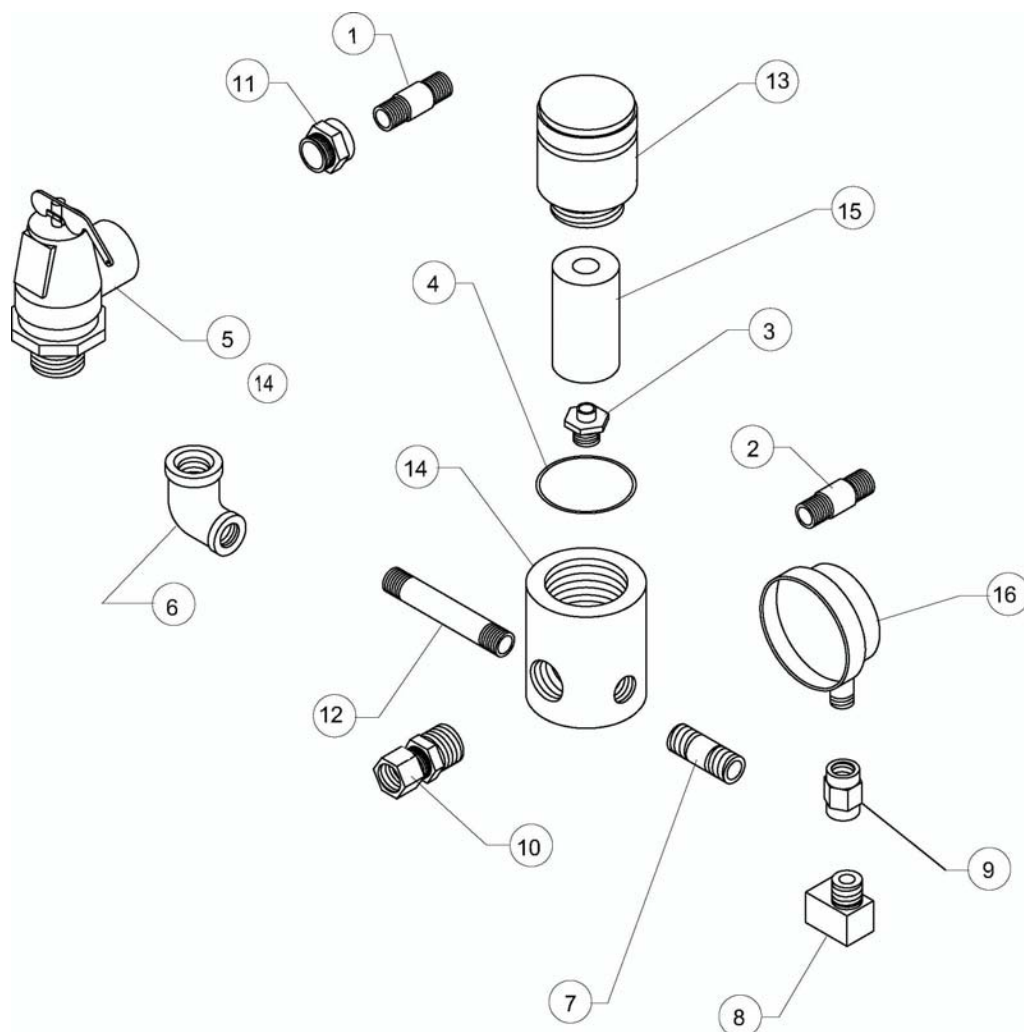
Problem	Cause	Possible Solution
	Filter valve not open	Contact an authorized BKI service agent for corrective action.
	Filter paper on screen clogged with crumbs	Change filter paper. If problems persist, contact an authorized BKI service agent for corrective action.
	Motor hums, but does not pump	Check for clogged pump. If problems persist, contact an authorized BKI service agent for corrective action.
	Motor and pump coupling worn	Contact an authorized BKI service agent for corrective action.
	No power to control panel	Make sure drain valve is completely closed. If problems persist, contact an authorized BKI service agent for corrective action.
Computer Hangs	Computer malfunction.	Press and hold the Toggle/Clear button while moving the FRY/OFF/FILTER switch from FRY to OFF and back to FRY. If problems persist, contact an authorized BKI service agent for corrective action.

Replacement Parts

Use the information in this section to identify replacement parts. To order replacement parts, call your local BKI sales and service representative. Before calling, please note the serial number, model number and voltage on the rating tag affixed to the unit.

Assemblies

Description	Assembly #	Figure #	Table #
DEAD WEIGHT ASSEMBLY	AN19104100	Figure 1	Table 1
DOOR ASSEMBLY	SB1910	Figure 2	Table 2
DRAIN/MOTOR/PIPING ASSEMBLY	N/A	Figure 3	Table 3
DRAIN VALVE & PLUGS	SB1999S	Figure 4	Table 4
DOMESTIC FRONT PANEL FKM/FKM-F EUROPEAN FRONT PANEL FKM/FKM-F	AN19108100 AN19108200	Figure 5	Table 5
FRONT PANEL FKM-FC	AN19106400	Figure 6	Table 6
LID/TOP ASSEMBLY	SB1992S	Figure 7	Table 7
OIL VAT ASSEMBLY	AN16010200	Figure 8	Table 8
QUICK DISCONNECT ASSEMBLY	AN19103300 SB1997S	Figure 9	Table 9
DOMESTIC REAR PANEL FKM/FKM-F EUROPEAN REAR PANEL FKM/FKM-F	AN19106100 AN19106500	Figure 10	Table 10
REAR PANEL FKM-FC	AN19106200	Figure 11	Table 11
SOLENOID VALVE	AN19104300	Figure 12	Table 12

Figure 1. Dead Weight Assembly**Table 1. Dead Weight Assembly Parts**

ITEM #	PART #	QTY	DESCRIPTION
1	FT0395	1	PIPE, POPOFF VALVE BAFF BOX
2	FT0396	1	PIPE, DEAD WT TO BAFFLE BOX
3	O0001	1	ORIFICE, SS
4	O0002	1	GASKET, O-RING #2-222
5	PV0001	1	VALVE, POP SAFETY 1321148
6	FT0066	1	ELL, REDUCER 3/4 X 1/2 90 DEG
7	FT0235	1	NIPPLE, 1/2 X C SS
8	FT0190	1	ELL, STREET 1/4 90 DEG CP
9	FT0084	1	COUPLING, BRASS 1/4
10	FT0563	1	FITTING, COMPRESSION 3/4"
11	FT0067	1	BUSHING, C110JO 3/4 X 1/2 CP
12	FT0234	1	NIPPLE, 1/4 X 1 1/2 SS 304
13	C0657	1	COVER, DEAD WEIGHT VALVE FKM
14	B0969	1	BODY, DEAD WEIGHT VALVE FKM
15	W0201	1	WEIGHT, VALVE FKM 12#
16	G0064	1	GAUGE, PRESSURE 30 PSI

Figure 2. Door Assembly

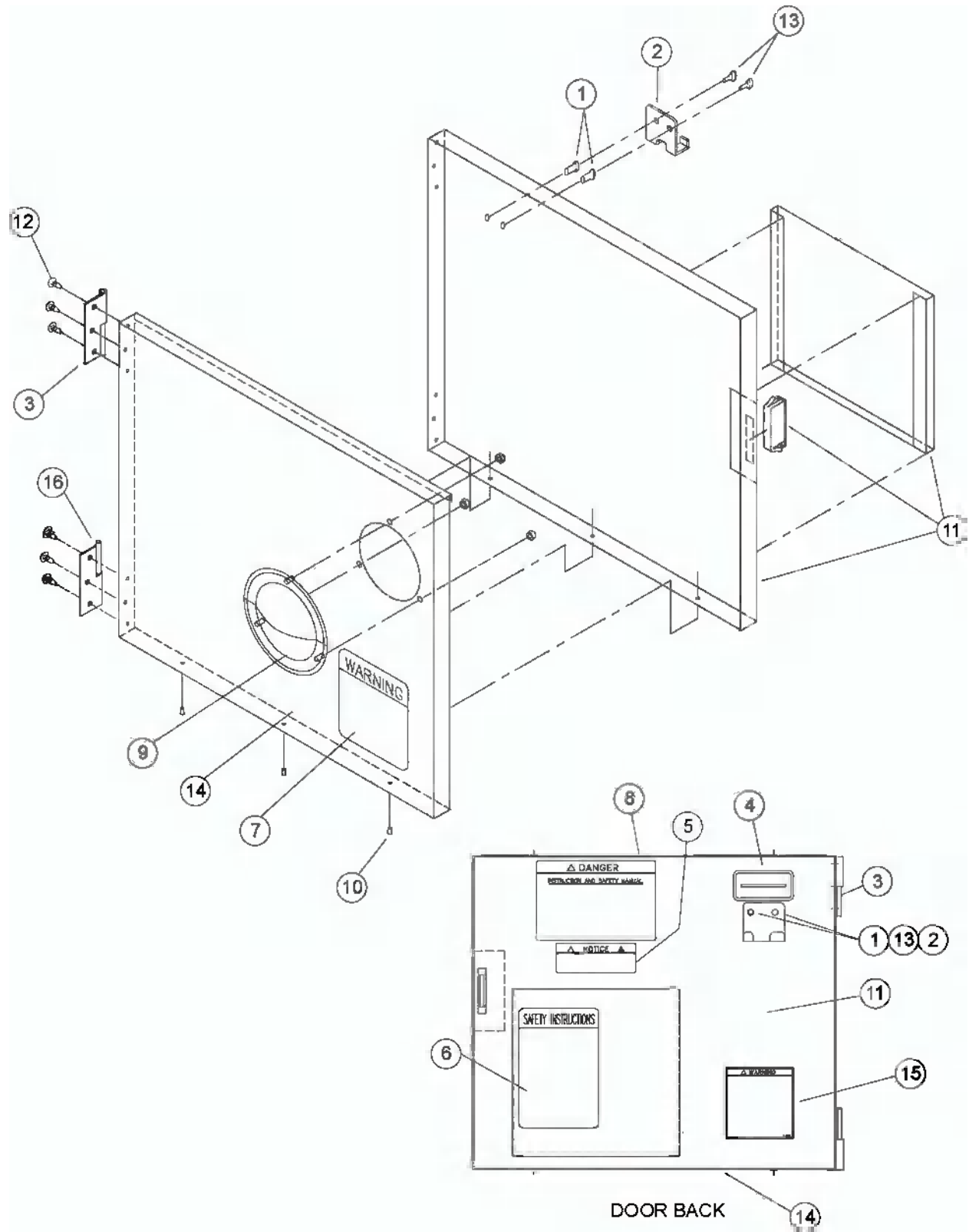


Table 2. Door Assembly Parts

ITEM #	PART #	QTY	DESCRIPTION
1	F0083	2	THREAD INSERT 10-24 STEEL
2	ST0013	1	BRACKET, BRUSH HOLDER FKM, LPF,LGF
3	H0010	2	HINGE, LH PIN HALF
4	N0059	1	DECAL, SMALL BRUSH/
5	N0165	1	DECAL, NOTICE LOST MANUAL
6	N0527	1	DECAL, SAFETY INSTR FRYERS
7	N0175	1	DECAL, SLIPPING ADMONITIONS
8	N0176	1	DECAL, INSTR & SAFETY MANUAL
9	P0022	1	HANDLE, PULL SS P60-1010
10	RIV172	3	RIVET, 1/8 X 1/4 CS PLT POP
11	SB1951	1	INSIDE DOOR POCKET/MAGNET WELD FKM
12	SCR008	6	SCREW, 10 X 1/2 PHIL TRUSS HD
13	SCR383	2	SCREW, 10-24 X 1/2" PHIL TRUSS HD
14	WFKMA178	1	DOOR, FRYER OUTSIDE WELD
15	N0153	1	DECAL, FKM WARNING ACME SCREW
16	H0009	1	HINGE, DOOR,RH,PIN SIDE FRY.DOORS

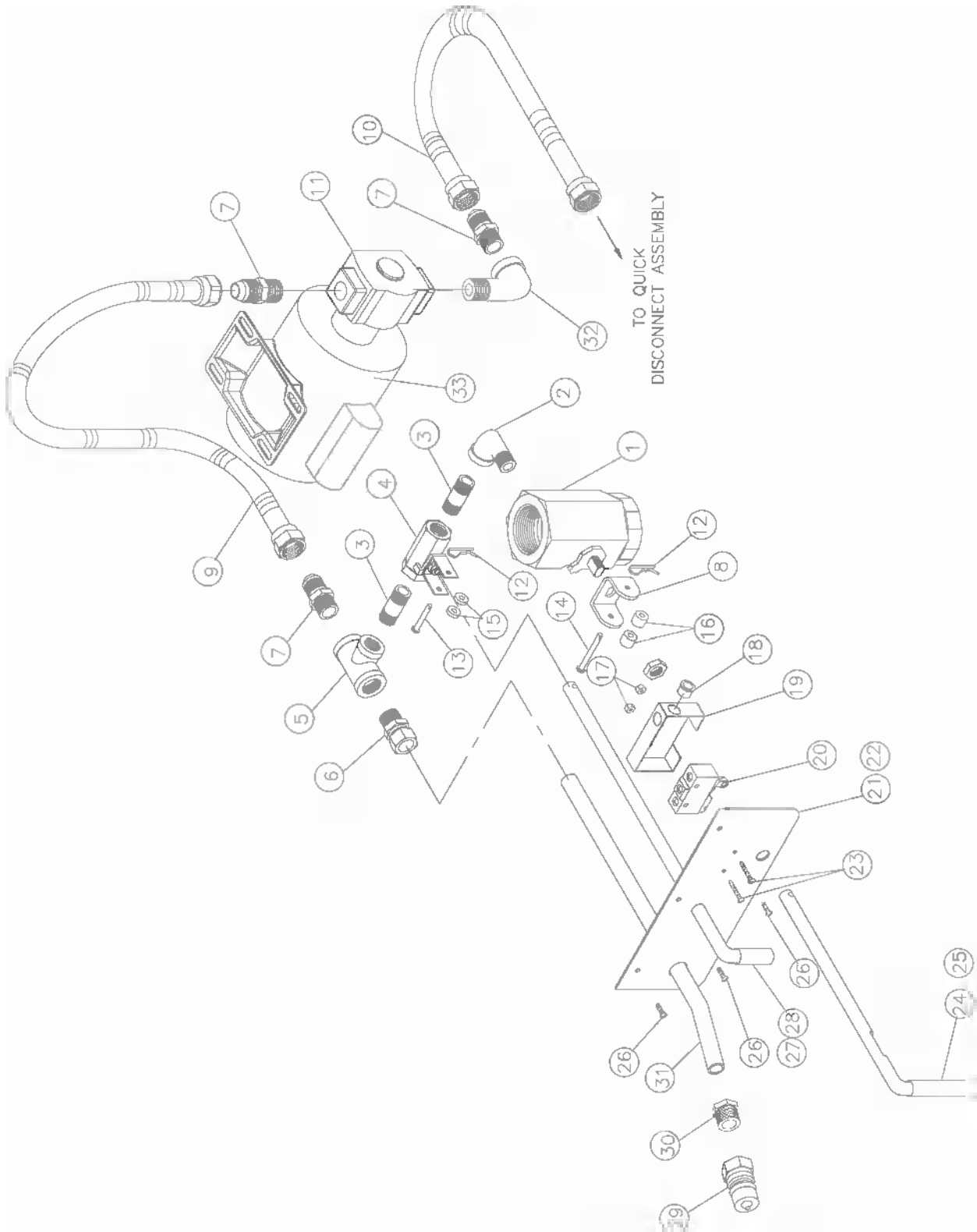
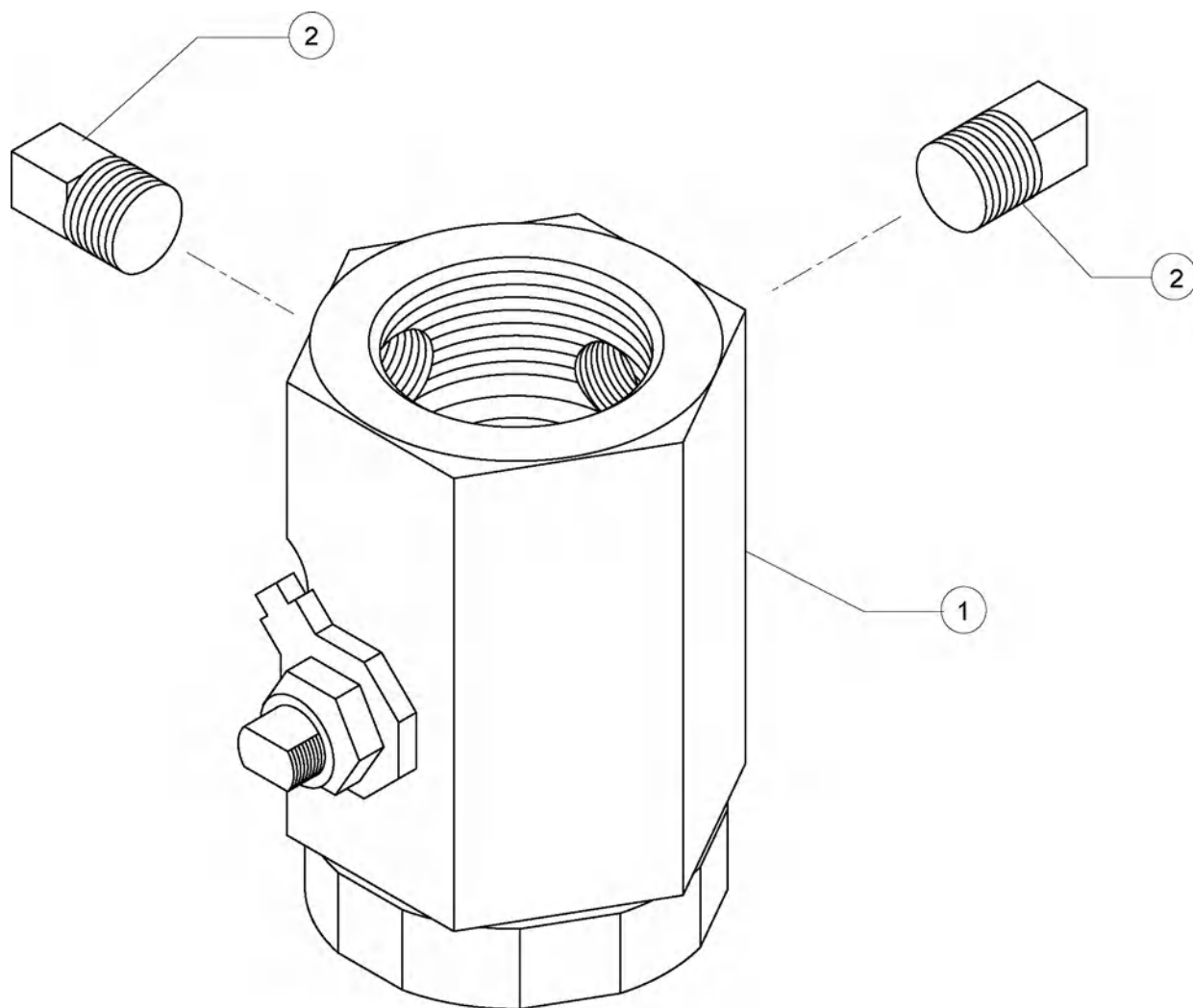
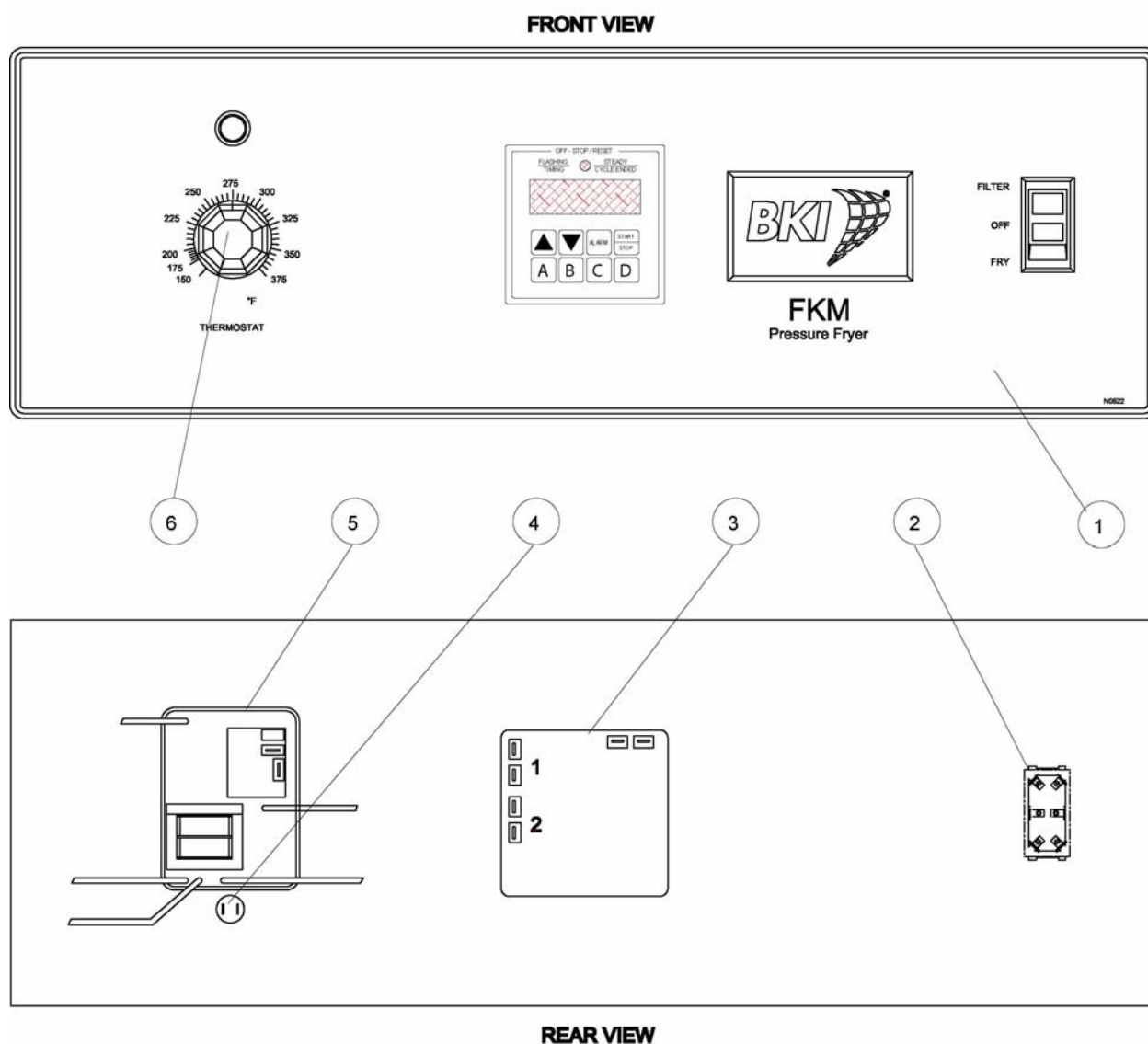
Figure 3. Drain/Motor/Piping Assembly

Table 3. Drain/Motor/Piping Assembly Parts

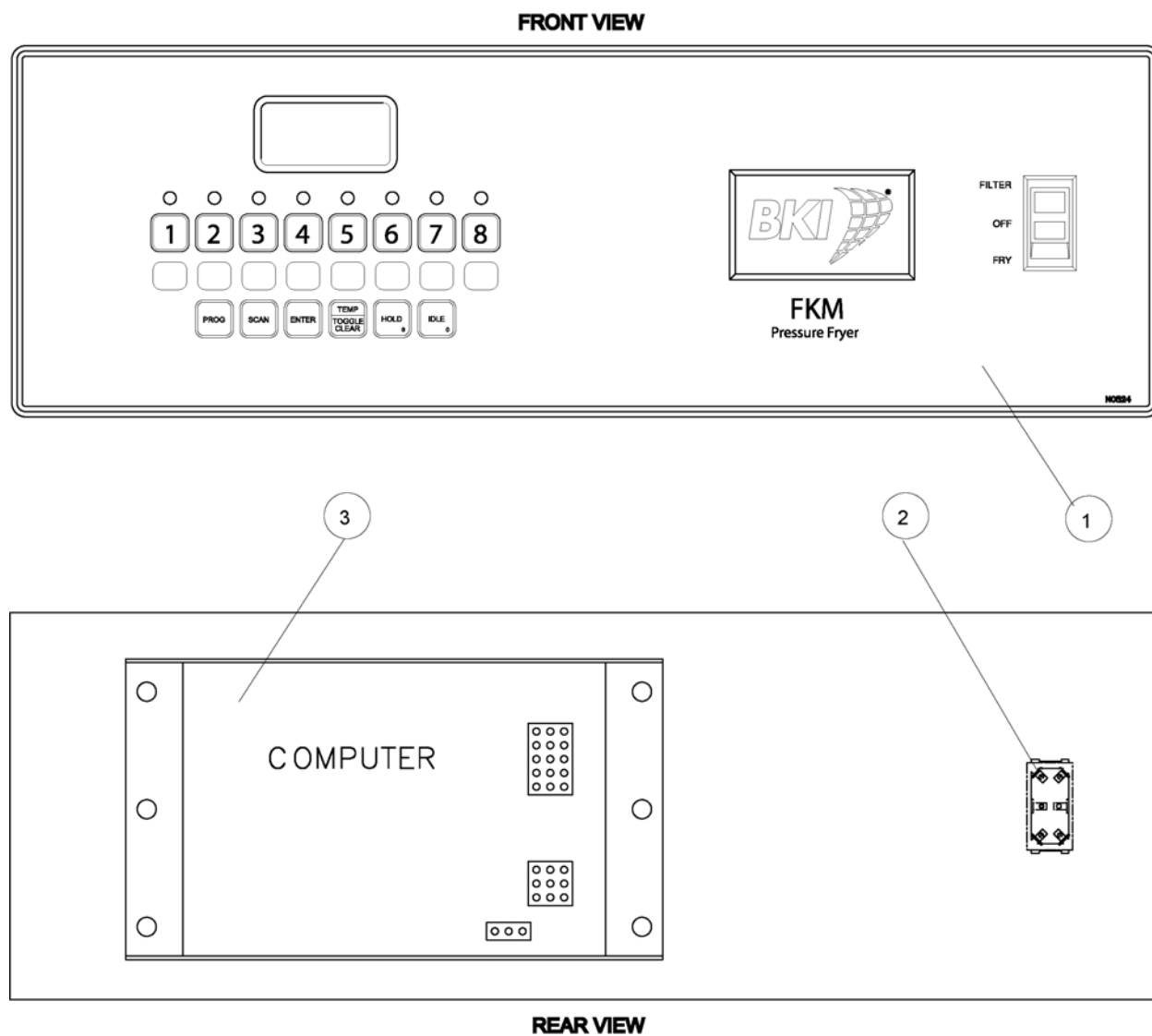
ITEM #	PART #	QTY	DESCRIPTION
1	MB19101000	1	DRAIN VALVE REPLACEMENT
2	FT0044	1	ELL, STREET 3/8 90 DEG BLACK
3	FT0412	2	NIPPLE, 3/8 NPT X 1 1/2 SCH 40
4	SB1314	1	BALL VALVE ASSY, FRYERS
5	FT0538	1	TEE, 1/2 X 1/2 X 3/8 BLK
6	FT0507	1	CONNECTOR, MALE 10FBU-S NKL PLTD
7	FT0536	3	COUPLING, 5/8 45° FLARE TO
8	FT0543	1	DRAIN VALVE BRACKET, FRYERS
9	TU0206	1	TUBING, 29" 1/2" ID
10	TU0205	1	TUBING, 12" 1/2" ID
11	P0070	1	PUMP ONLY FOR HAIGHT MOTOR
12	F0254	2	PIN, COTTER HAIRPIN #213
13	F0255	1	PIN, CLEVIS 3/16 X 1-1/4
14	F0253	1	PIN, CLEVIS 3/16 X 1 3/4
15	SP0014	2	SPACER, ALUM .5 X .125
16	SP0034	2	SPACER, DRAIN VALVE BRKT FRYERS
17	NUT253	2	NUT, 6-32 S/S 18-8 NYLON
18	F0158	1	BUSHING, BLK 1/2 HEYCO SNAP
19	LZ0130	1	SWITCH, ACT. COVER FKM247
20	S0054	1	SWITCH, MICRO BZ-2RW822-A2
21	H0089	1	HANDLE SUPPORT PLATE
22	N0285	1	DECAL, FKM-F DRAIN HNDL PLATE
23	SCR194	2	SCREW, 6-32 X 1 SL RD HD MS
24	H0215	1	HANDLE, DRAIN VALVE FKM BLF
25	C0672	1	COVER, DRAIN HANDLE RED
26	SCR006	3	SCREW, 8 X 1/2 PHIL PAN HEAD
27	MA19100508	1	FILL VALVE HANDLE, FRYERS
28	C0668	1	COVER, FILL HANDLE BLACK
29	P0081	1	PLUG, F-H4F4-7-7 QUIK DISCONN
30	B0851	1	BUSHING, BLK HEX REDUCING
31	MA19100800	1	TUBING, TEE TO DISCONNECT
32	FT0132	1	ELL, STREET 1/2 90 DEG BLACK
33	M0053	1	MOTOR, LEESON LESS CORD/PUMP

Figure 4. Drain Valve & Plugs**Table 4. Drain Valve & Plugs Parts**

ITEM #	PART #	QTY	DESCRIPTION
1	MB19101000	1	DRAIN VALVE REPLACEMENT
2	FT0243	2	PLUG, 3/8" SQ HEAD PIPE

Figure 5. Domestic/European Front Panel FKM/FKM-F**Table 5.** Domestic/European Front Panel FKM/FKM-F Parts

ITEM #	PART #	QTY	DESCRIPTION
1	N0522	1	DECAL, CTL PNL FKM FKMF
2	S0104	1	SWITCH, RKR DPDT 15A 250V LAMP
3	TI0032	1	TIMER, 230V DIGITAL 4 BUTTON
4	PL0004	1	PILOT LIGHT, ROUND 250V
5	T0075	1	THERMOSTAT, SOLID STATE FRYER
6	K0040	1	KNOB, S/S STRAT T0075

Figure 6. Front Panel FKM-FC**Table 6.** Front Panel FKM-FC Domestic Parts

ITEM #	PART #	QTY	DESCRIPTION
1	N0524	1	DECAL,CTL PNL FKMFC
2	S0104	1	SWITCH, RKR DPDT 15A 250V LAMP
3	CP0039	1	CONTROLLER, VFD LESS HARNESS

Figure 7. Lid/Top (sheet 1 of 4)

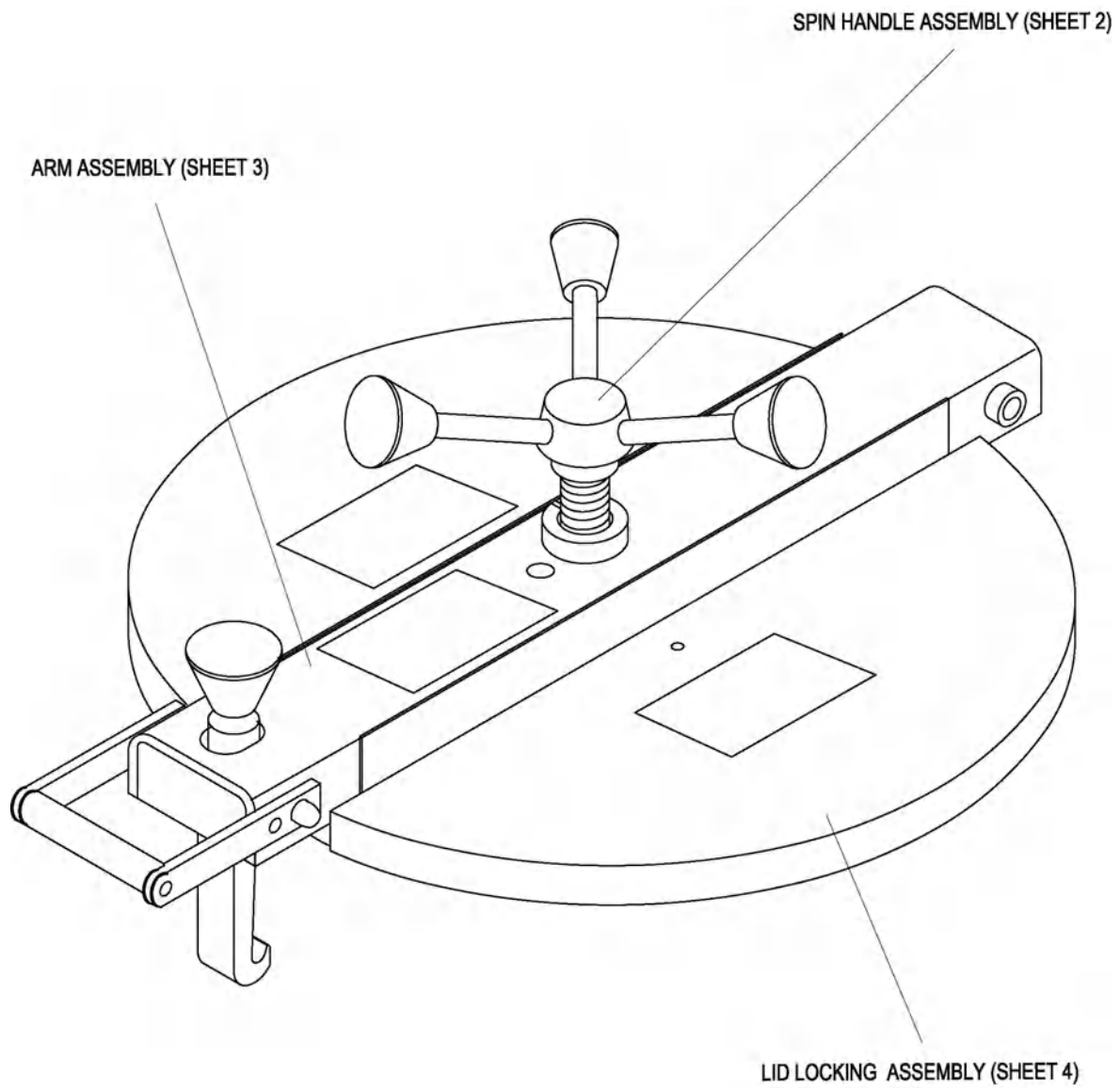


Figure 7. Lid/Top (Sheet 2 of 4)

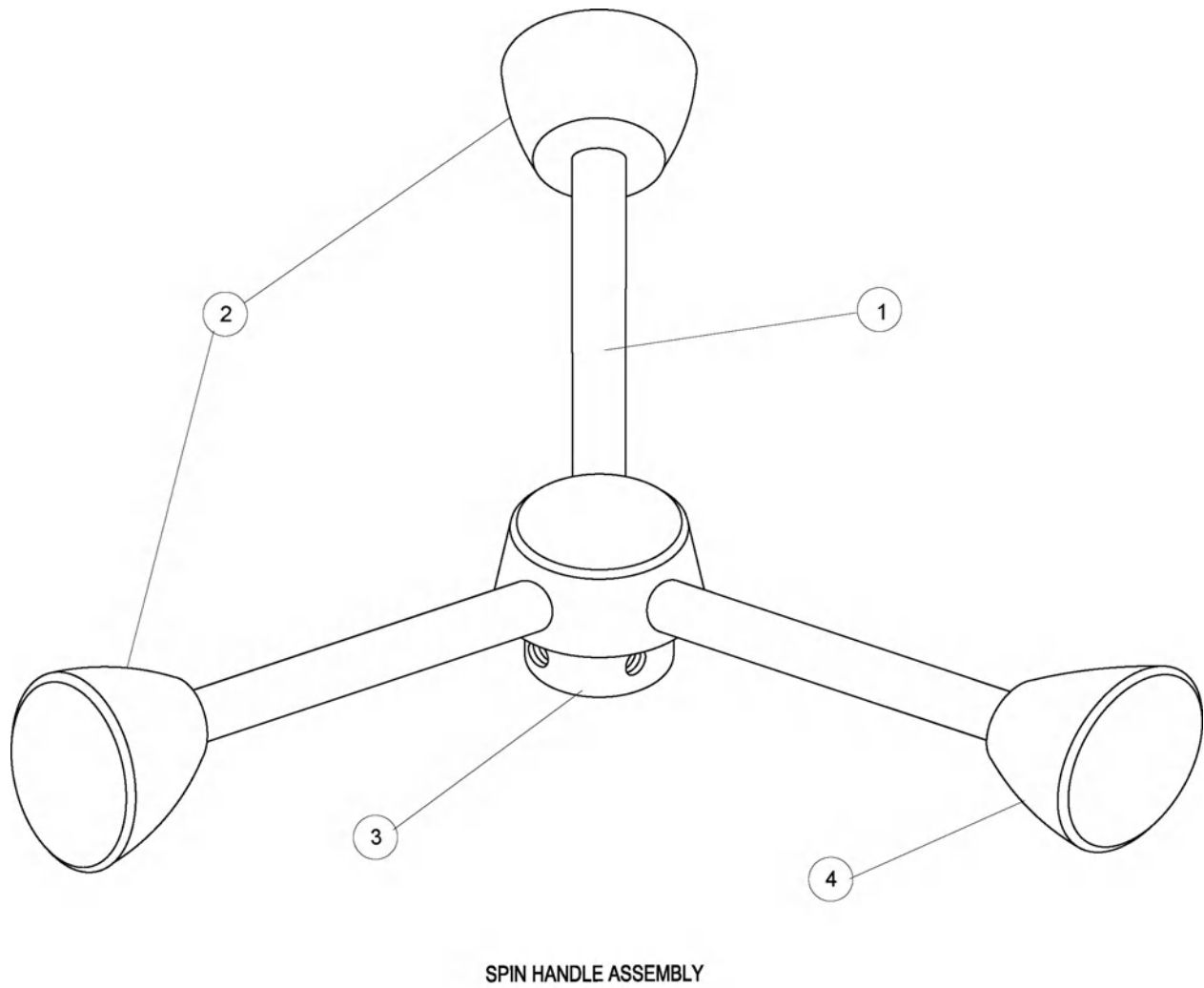


Figure 7. Lid/Top (Sheet 3 of 4)

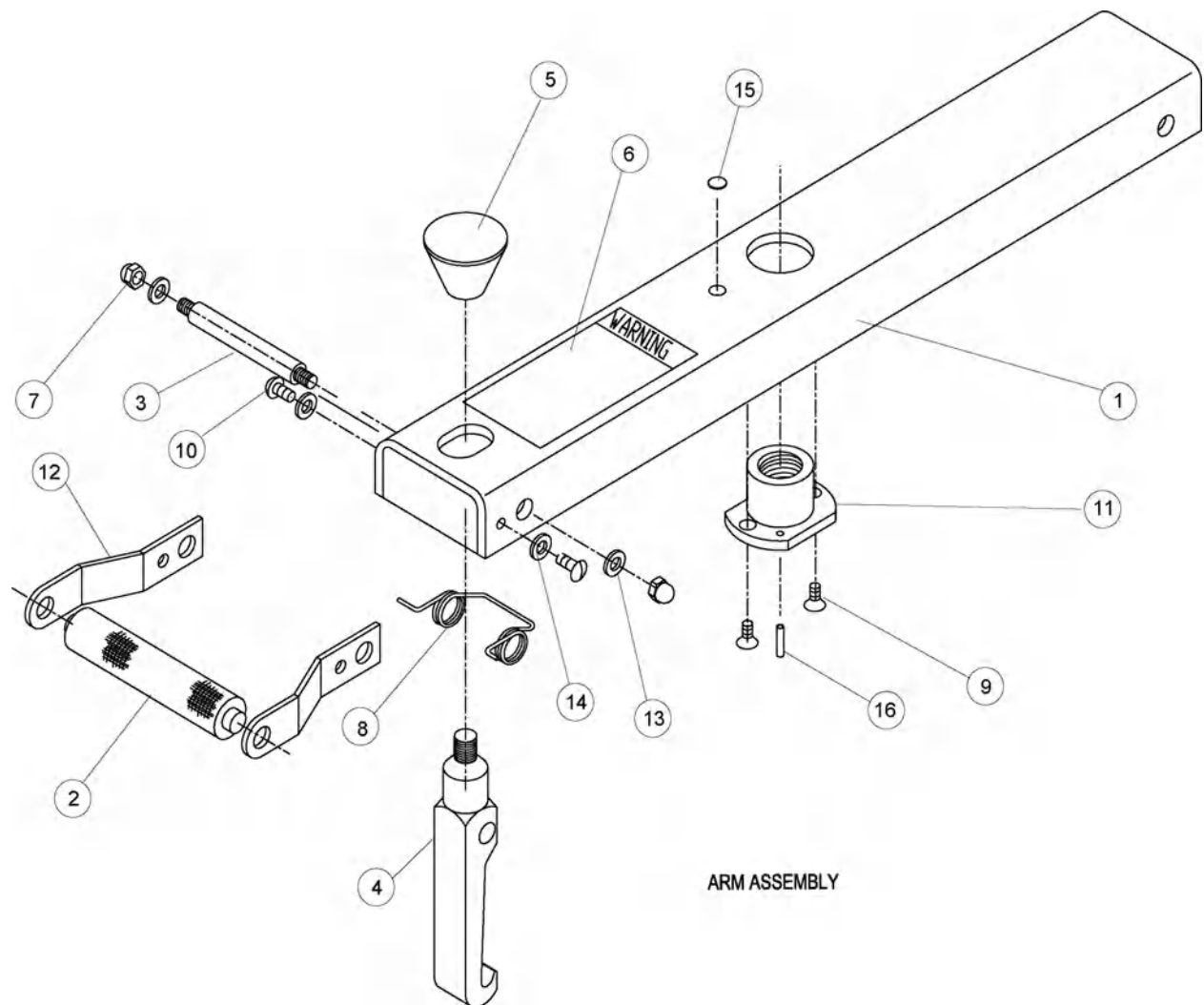


Figure 7. Lid/Top (Sheet 4 of 4)

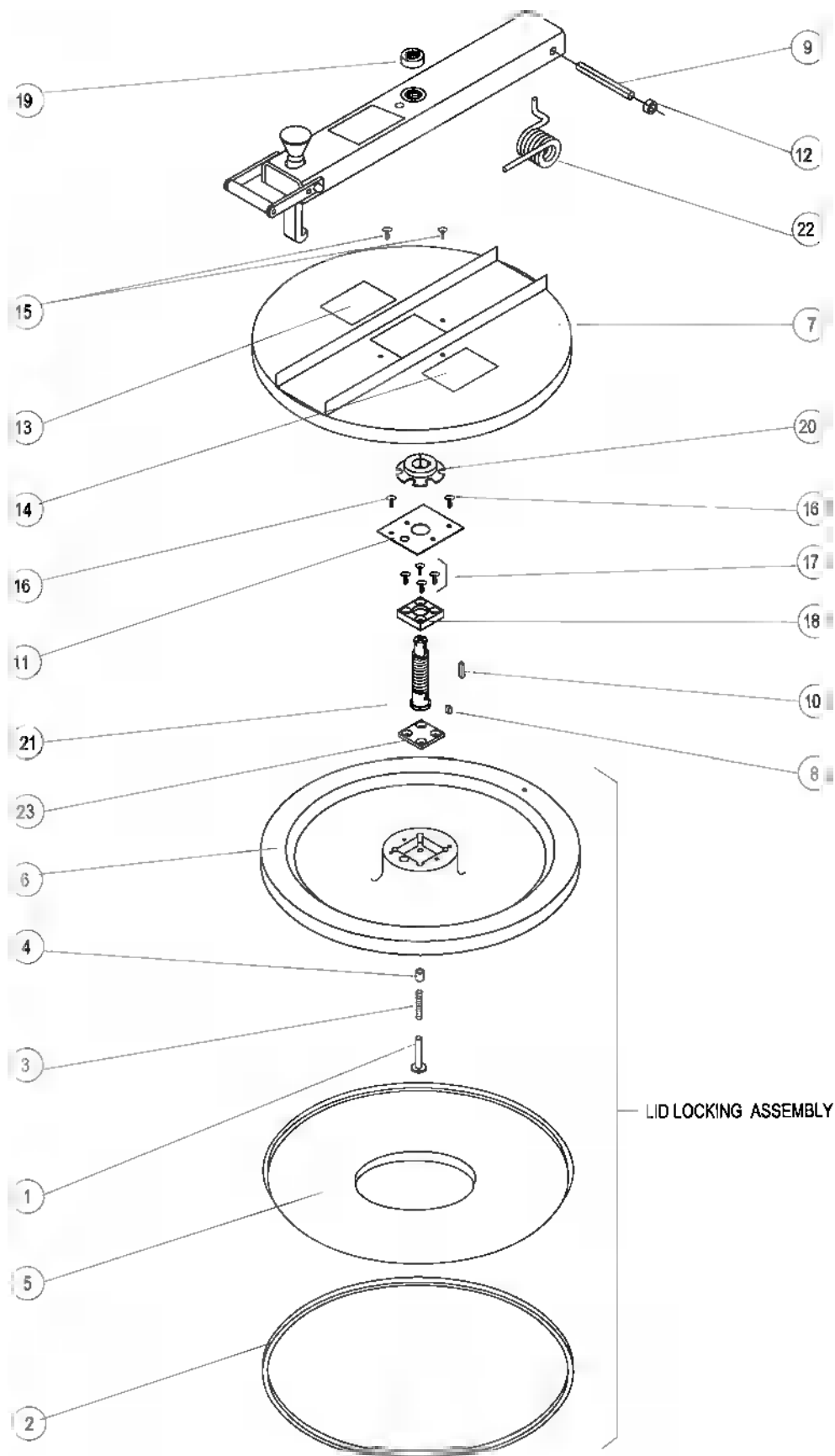


Table 7. Lid/Top Parts

ITEM #	PART #	QTY	DESCRIPTION
Figure 7 (sheet 1)	SB1992S		LID/TOP
Figure 7 (sheet 2)	SB3481	1	HANDLE ASSY, SPIN
1	FT0332	3	STUD, 5.5" TIGHTEN DN HN
2	K0003	2	KNOB, BLACK #85C
3	K0020	1	HUB, TIGHTEN DOWN
4	K0043	1	KNOB, ORANGE
Figure 7 (sheet 3)	AB19103900	1	ARM ASSY, FKM
1	A0120	1	ARM COMPLETE FKM LGF
2	H0155	1	HANDLE, BLK DELRIN FKM LPF LGF
3	P0094	1	PIN, HOOK FKM, LPF, LGF
4	H0024	1	HOOK, LID 1018 ALLOY
5	K0043	1	KNOB, ORANGE
6	N0160	1	DECAL, WARNING BEFORE USING
7	NUT128	2	NUT, 5/16-18 SS 18-8 CAP
8	S0091	1	SPRING, HOOK LGF LPF FKM
9	SCR122	2	SCREW, 1/4-20 X 1/2 FLAT HD
10	SCR259	2	SCREW, 1/4-20 X 1/2 PHIL RD HD
11	TB0020	1	BUSHING, BRONZE 1"
12	H0156	2	HANDLE SIDE FOR H0155 FKM LPF LGF
13	WSH045	2	WASHER, 5/16 LOCK ZINC PLTD
14	WSH102	2	WASHER, 1/4 INT LOCK
15	FT0407	1	PLUG, HOLE 3/8" SHORT PRONG
16	F0026	1	ROLL PIN, 5/32 X 3/4
Figure 7 (sheet 4)	SB1989	1	LID LOCKING ASSY W/INSERT FKM
1	F0353	1	PIN, LOCKING FKM LGF LPF
2	G0016	1	GASKET, FKM LID BONDED SILICON
3	S0155	1	SPRING, LOCKING PIN W/LID INSERT
4	B0857	1	BUSHING, BRONZE 3/8X9/16X5/8
5	P0115	1	LID INSERT, FKM
6	FK0010	1	LID, FKM CAST ALUM
7	C0674	1	LID COVER AND ARM GUIDE FKM
8	F0107	1	LOCK KEY PIN, FRYERS
9	FKMA016	1	PIN, HINGE
10	FKMA152	1	KEY, TIGHTEN DOWN SCREW
11	FKMA201	1	PLATE, TIGHTEN DOWN FKM
12	FT0049	2	COLLAR, 1/2" SET BRIGHT
13	N0153	1	DECAL, FKM WARNING ACME SCREW
14	N0345	1	DECAL, HOOK LID INSTRUCTIONS
15	SCR383	2	SCREW, 10-24 X 1/2" PHIL TRUSS HD
16	SCR176	2	SCREW, 8-32 X 3/8 SLOT BINDING
17	SCR178	1	SCREW, 5/16-18 X 1 FLAT HD
18	TB0021	1	TIGHTEN DOWN BASE COLD ROLLED
19	TC0003	1	COLLAR, THREADED SHAFT
20	TC0005	1	COLLAR, LOCKING RING
21	TS0010	1	SCREW, TIGHTEN DOWN
22	S0071	1	SPRING, TORSION
23	LZ0107	1	PLATE, LID FOR LOCKING DEVICE

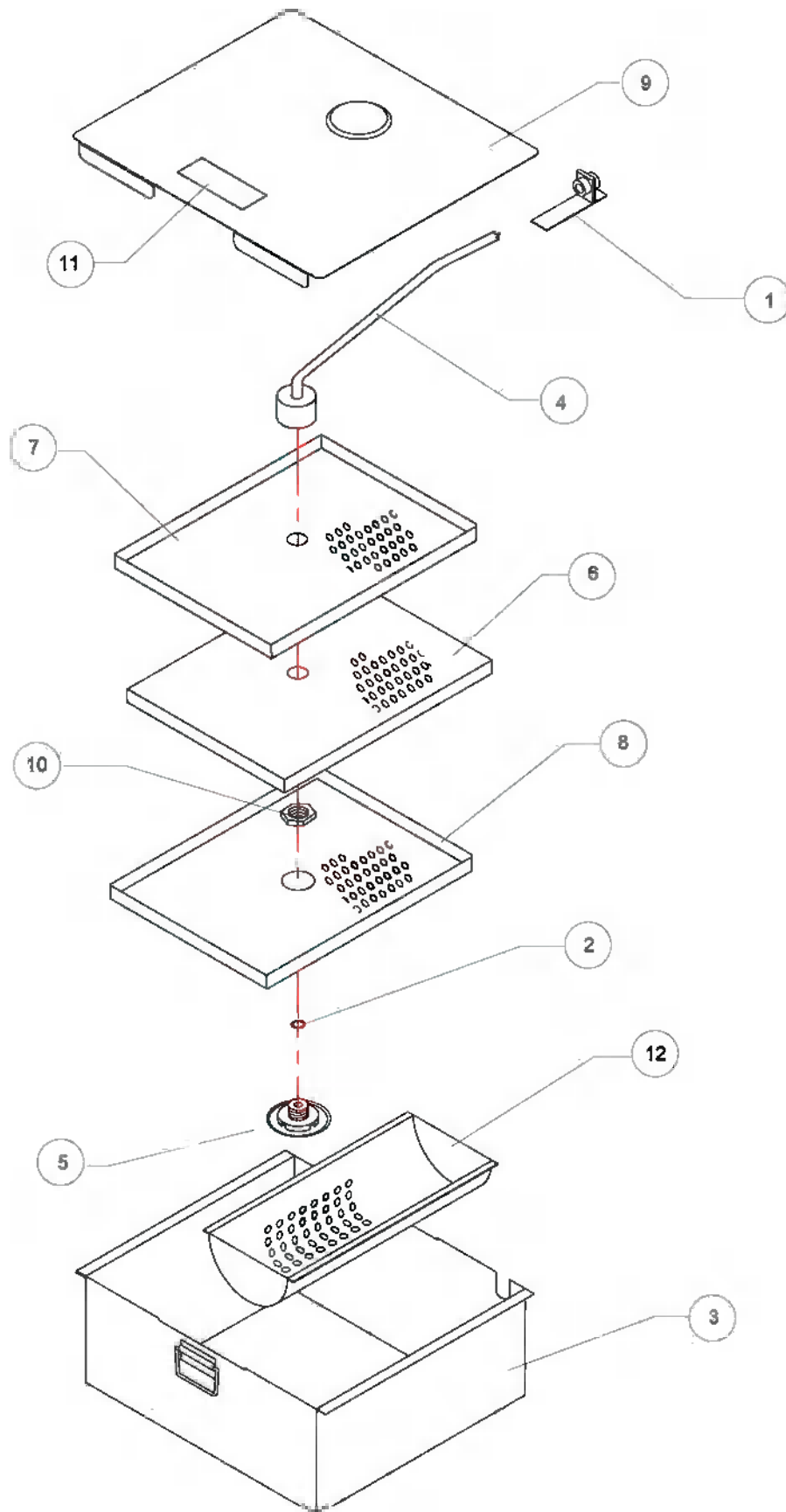
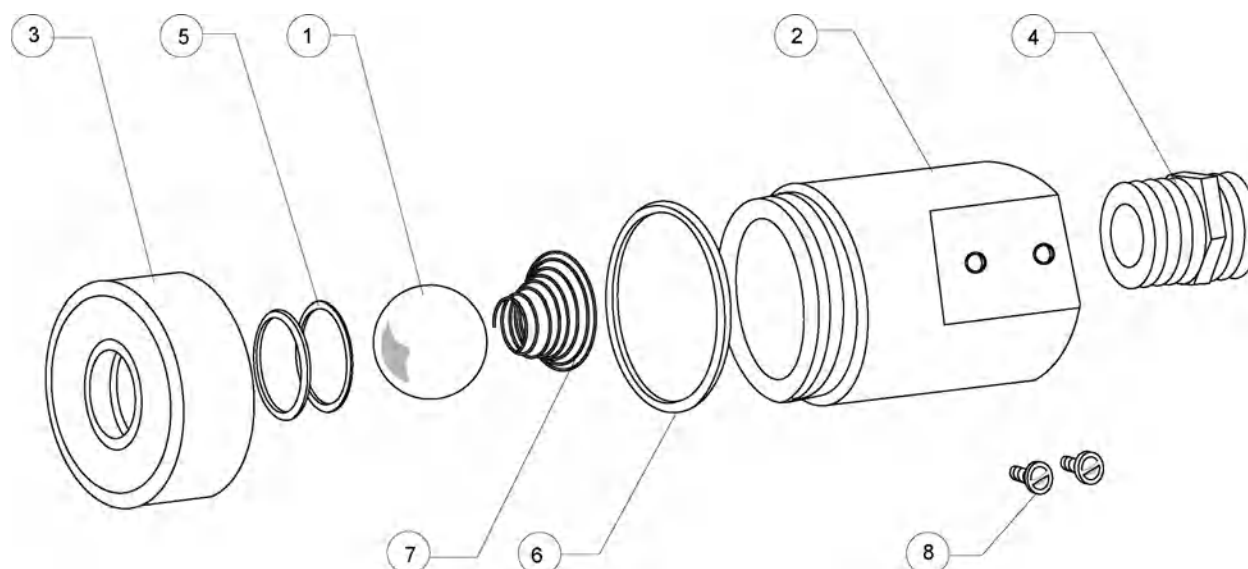
Figure 8. Oil Vat Assembly

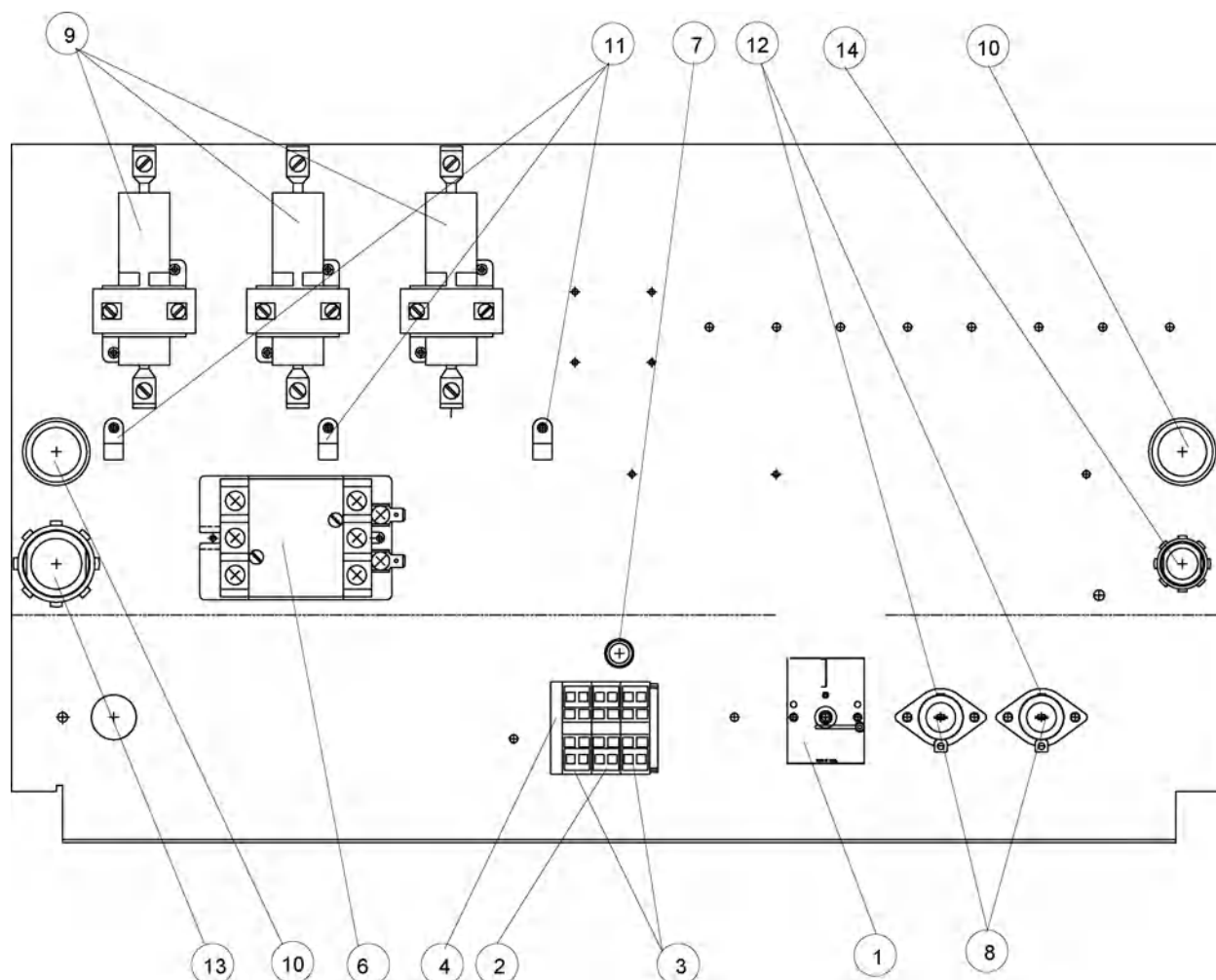
Table 8. Oil Vat Assembly Parts

ITEM #	PART #	QTY	DESCRIPTION
1	SB1991	1	QUIK DISCONNECT BRACKET WELDMENT
2	O0013	1	O-RING, FLUOROCARBON V680-70
3	WB16010600	1	FILTER VAT WELD QUIK DISC
4	WB16010400	1	FILTER VAT TUBE WELD, BLF
5	SB7659	1	FILTER SCREEN FITTING SPOTWELD
6	FS0003	1	FILTER SCREEN, TOP
7	FS0002	1	FILTER SCREEN, INTERCEPTOR
8	FS0001	1	FILTER SCREEN, BOTTOM
9	FKMA357	1	COVER, FILTER VAT
10	FC0004	1	NUT SCREEN RETAINING FKM-F &
11	N0395	1	DECAL, VAT COVER SAFETY WARN
12	SB7675	1	CRUMB BASKET WELD, LG VAT ASSY

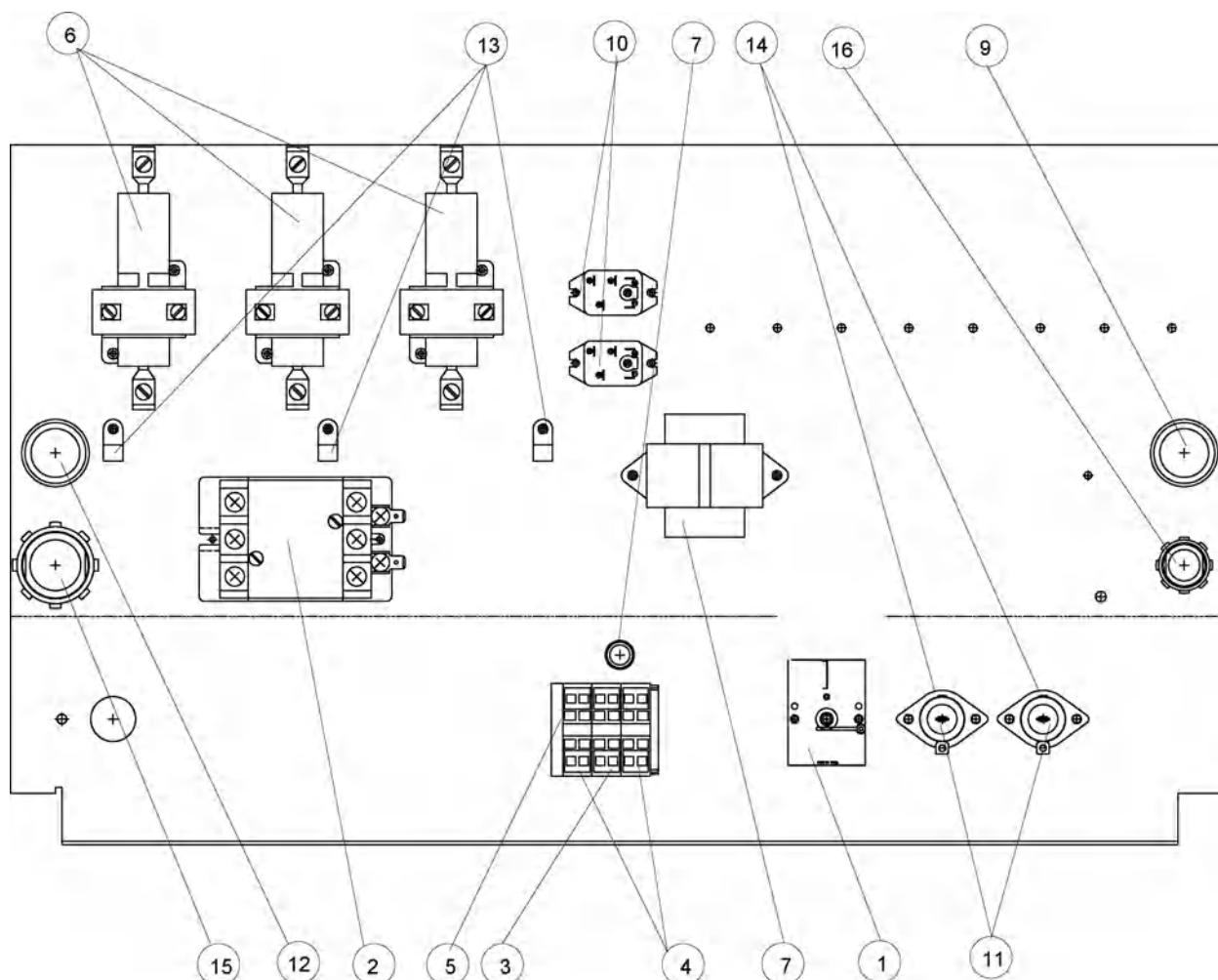
Figure 9. Quick Disconnect Assembly**Table 9. Quick Disconnect Assembly Parts**

ITEM #	PART #	QTY	DESCRIPTION
1	B0996	1	BALL, 11/16" STEEL BEARING
2	FT0429	1	QUICK DISCONNECT, PUMP SIDE
3	FT0500	1	QUICK DISCONNECT, VAT SIDE
4	FT0536*	1	COUPLING, 5/8 45° FLARE TO
5	O0013	2	O-RING, FLUOROCARBON V680-70
6	O0014	1	O-RING, PARKER #2-124 LARGE
7	S0138	1	SPRING, FOR QUICK DISCONNECT
8	SCR4531*	2	SCREW, #10 24X3/8" WASHERED

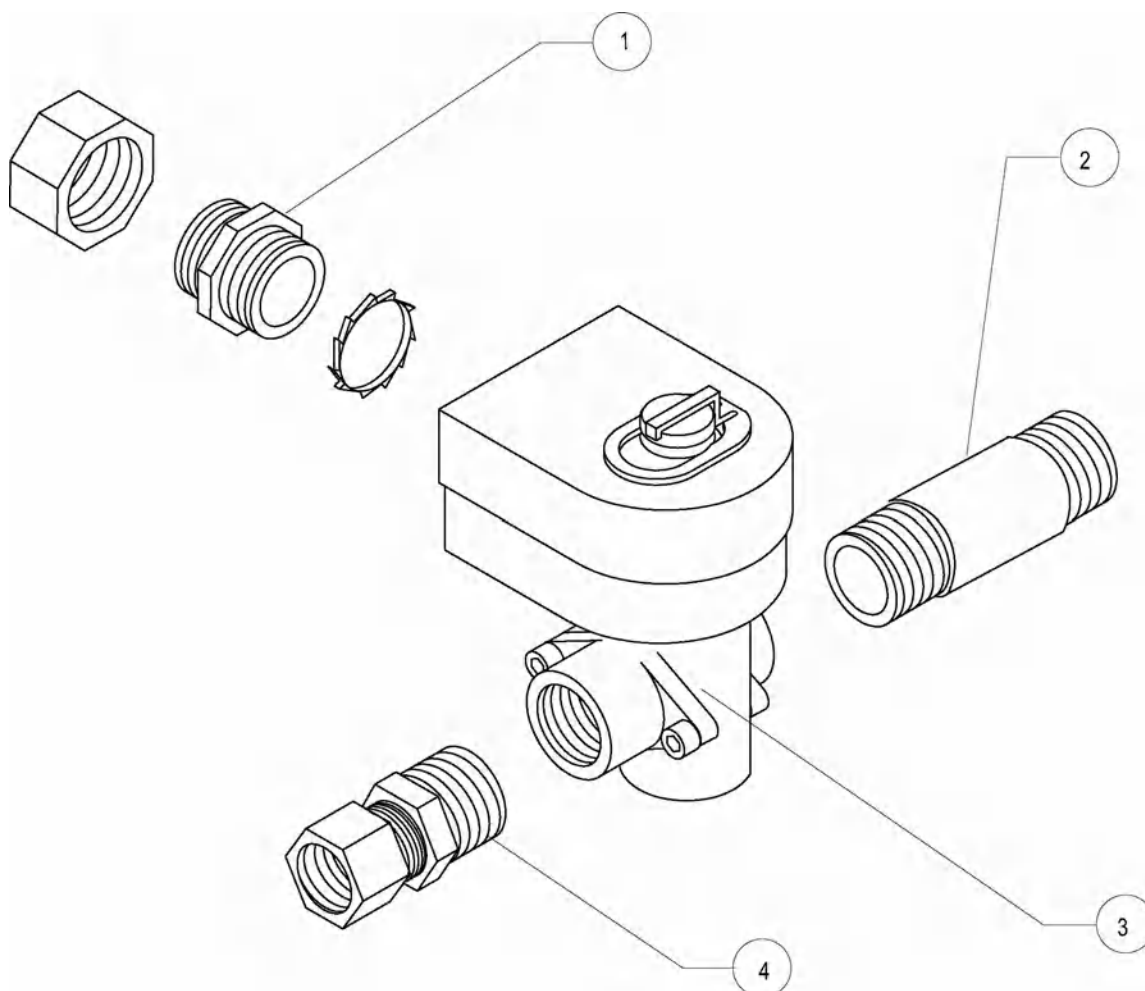
* - Not included with SB1997S

Figure 10. Domestic/European Rear Panel FKM/FKM-F**Table 10.** Domestic/European Rear Panel FKM/FKM-F Parts

ITEM #	PART #	QTY	DESCRIPTION
1	T0036	1	THERMOSTAT, HI LIMIT 540 DEG
2	TB0064	1	TERM BLOCK 4 CONDUCTOR CTR
3	TB0065	2	TERM BLOCK 4 CONDUCTOR W/MTG FOOT
4	TB0068	1	TERM BLOCK END PLATE
5	TB0069	1	TERM BLOCK JUMPER BAR (not shown)
6	R0148	1	RELAY, 3 POLE 42CF35AG
7	F0158	1	BUSHING, BLK 1/2 HEYCO SNAP
8	F0097	2	FUSE, 15A 300V SC15 TIME DELAY
9	R0134	3	RELAY, MERCURY MDI 60NO220A
10	F0154	2	BUSHING, BLK 1-3/16 HEYCO SNAP
11	F0342	3	CLAMP, CABLE 3/16"
12	FH0001	2	FUSE HOLDER, 15A 300V HPF-EE
13	FT0080	1	CONNECTOR, BOX #7483 1"
14	FT0277	1	PLUG, HOLE 7/8" (1/2" CONDUIT)

Figure 11. Rear Panel FKM-FC**Table 11. Rear Panel FKM-FC Parts**

ITEM #	PART #	QTY	DESCRIPTION
1	T0036	1	THERMOSTAT, HI LIMIT 540 DEG
2	R0148	1	RELAY, 3 POLE 42CF35AG
3	TB0064	1	TERM BLOCK 4 CONDUCTOR CTR
4	TB0065	2	TERM BLOCK 4 CONDUCTOR W/MTG FOOT
5	TB0068	1	TERM BLOCK END PLATE
6	R0134	3	RELAY, MERCURY MDI 60NO220A
7	W0054	1	TRANSFORMER ASSY 240V
8	TB0069	1	TERM BLOCK JUMPER BAR (not shown)
9	F0154	2	BUSHING, BLK 1-3/16 HEYCO SNAP
10	R0044	2	RELAY, X-40, SGL FRYER
11	F0097	2	FUSE, 15A 300V SC15 TIME DELAY
12	F0158	1	BUSHING, BLK 1/2 HEYCO SNAP
13	F0342	3	CLAMP, CABLE 3/16"
14	FH0001	2	FUSE HOLDER, 15A 300V HPF-EE
15	FT0080	1	CONNECTOR, BOX #7483 1"
16	FT0277	1	PLUG, HOLE 7/8" (1/2" CONDUIT)

Figure 12. Solenoid Valve Assembly**Table 12.** Solenoid Valve Assembly Parts

ITEM #	PART #	QTY	DESCRIPTION
1	FT0249	1	CONNECTOR, 3/8 STR FLEX LIQUIDTITE
2	FT0396	1	PIPE, DEAD WT TO BAFFLE BOX
3	SV0001	1	VALVE, SOLENOID HV-214-761-2 240V
4	FT0563	1	FITTING, COMPRESSION 3/4"

Accessories

Description	Accessory #	Figure #	Item #
BASKET, LARGE FKM BAIL HANDLE	B0114	Figure 13	1
BRUSH, DRAIN (LONG WHITE)	B0075	Figure 13	2
BRUSH, L TIPPED 40152	B0063	Figure 13	3
BRUSH, LONG #5702	B0051	Figure 13	4
BRUSH, POT SCRUBBER, WHITE	B0049	Figure 13	5
BRUSH, SHORT #6175	B0052	Figure 13	6
CORD SET, FKM-FC 7'	SB7655	Figure 13	7
FILTER HOSE, FEMALE SOCKET	SB2332	Figure 13	8
FILTER VAT DOLLY FKM-F	SB7650	Figure 13	9
INSULATED MITT 13"	G0052	Figure 13	10

Figure 13. Accessories



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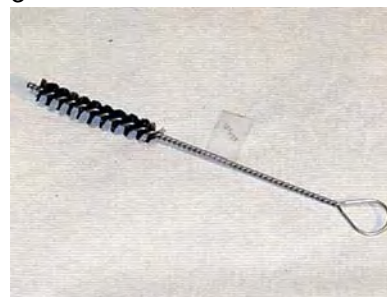
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Components

Description	Component #	Figure #	Item #
ARM ADJUSTABLE STOP /FKM	A0101	Figure 14	1
BAFFLE BOX ASSEMBLY	AN19102800	Figure 14	2
BRACKET, CALROD FKMA258	LZ0006	Figure 14	3
CALROD, 208V 5675W FKM-F	C0030	Figure 14	4
CALROD, 240V 5675W FKM-F	C0031	Figure 14	5
CASTER, W/TOP PLATE 5"	C0406	Figure 14	6
CLAMP, HOSE #6207 #4	HF0009	Figure 14	7
COLLAR, 1/2" SET BRIGHT	FT0049	Figure 14	8
CONDENSATION PAN WELDMENT	WFKMA341	Figure 14	9
DRAIN PIPE, CONDENSATE FKM	FKMA260	Figure 14	10
FILTER, FKM-F 13.5 X 20.5	FI0007	Figure 14	11
OUTLET BOX, (ON FKM ONLY FOR POWERING FKF)	SB1953	Figure 14	12
PROBE ASSEMBLY KIT, COMPUTER	SB1938	Figure 14	13
SEMI AUTOMATIC HOSE ASSEMBLY (FKM only)	SB1990	Figure 14	14
SIDE CABINET, L&R FKM/DNF	FKMA399	Figure 14	15
SLIDE, UHMW U-SHAPE .5 X 1/8ID	S0106	Figure 14	16
STRIKER PLATE (DOOR CATCH)	FKMA167	Figure 14	17
SWITCH, ACT. COVER FKMA247	LZ0130	Figure 14	18
THERMISTER PROBE/FTGS ASSEMBLY	SB7656	Figure 14	19
BRACKET BACK PLATE FKMA259	LZ0007	Figure 14	20
FILTER BAG CLIP FKM-F	ST0015	Figure 14	21

Figure 14. Components



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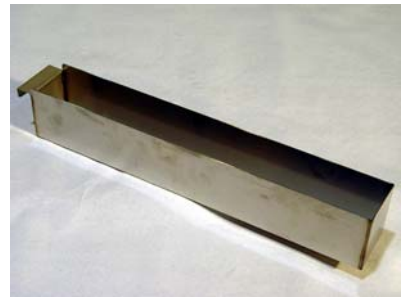
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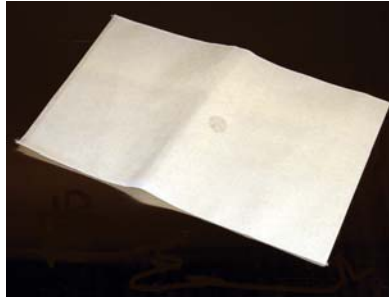
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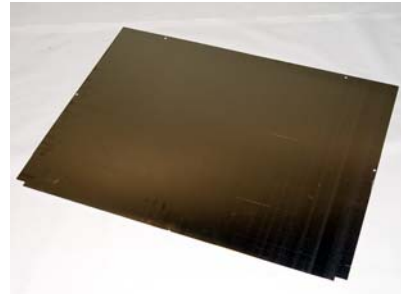
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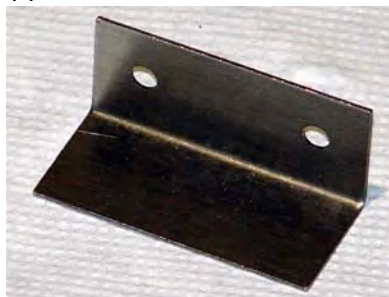
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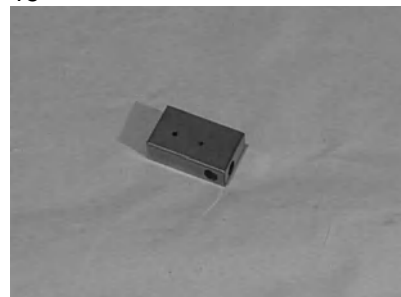
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Wiring Diagrams

Refer to the table below to find the wiring diagram associated with your unit.

Wiring Diagram	Figure #	Page #
Domestic FKM & FKM-F 208V/220V/240V	Figure 15	42
European FKM & FKM-F 220V/380V, 230V/400V, 240V/415V	Figure 16	46
FKM-FC 208V/220V/240V	Figure 17	50
FKM-FC 220V/380V, 230V/400V, 240V/415V	Figure 18	54

Figure 15. Domestic FKM & FKM-F 208V/220V/240V (Sheet 1 of 4)

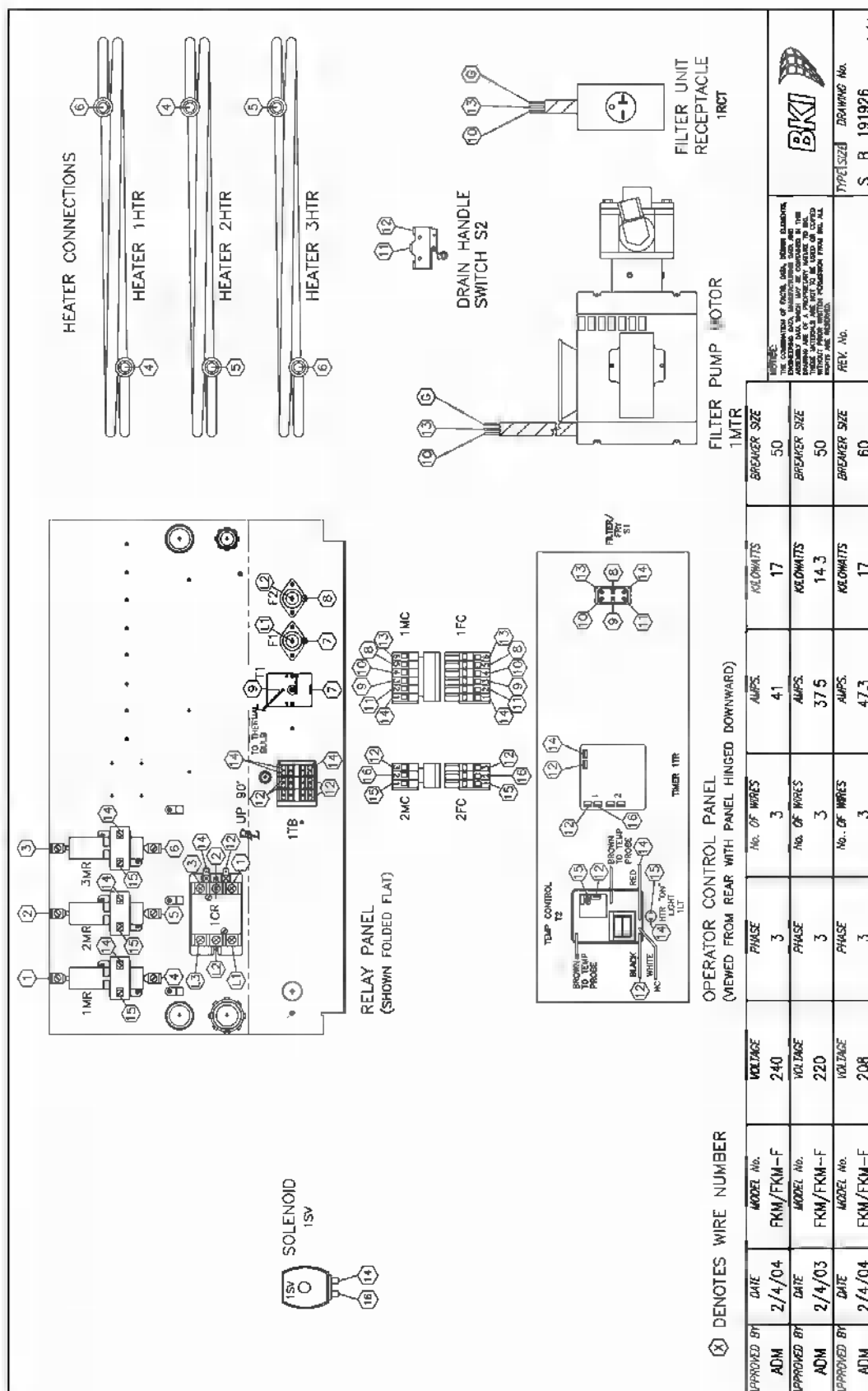


Figure 15. Domestic FKM & FKM-F 208V/220V/240V (Sheet 2 of 4)

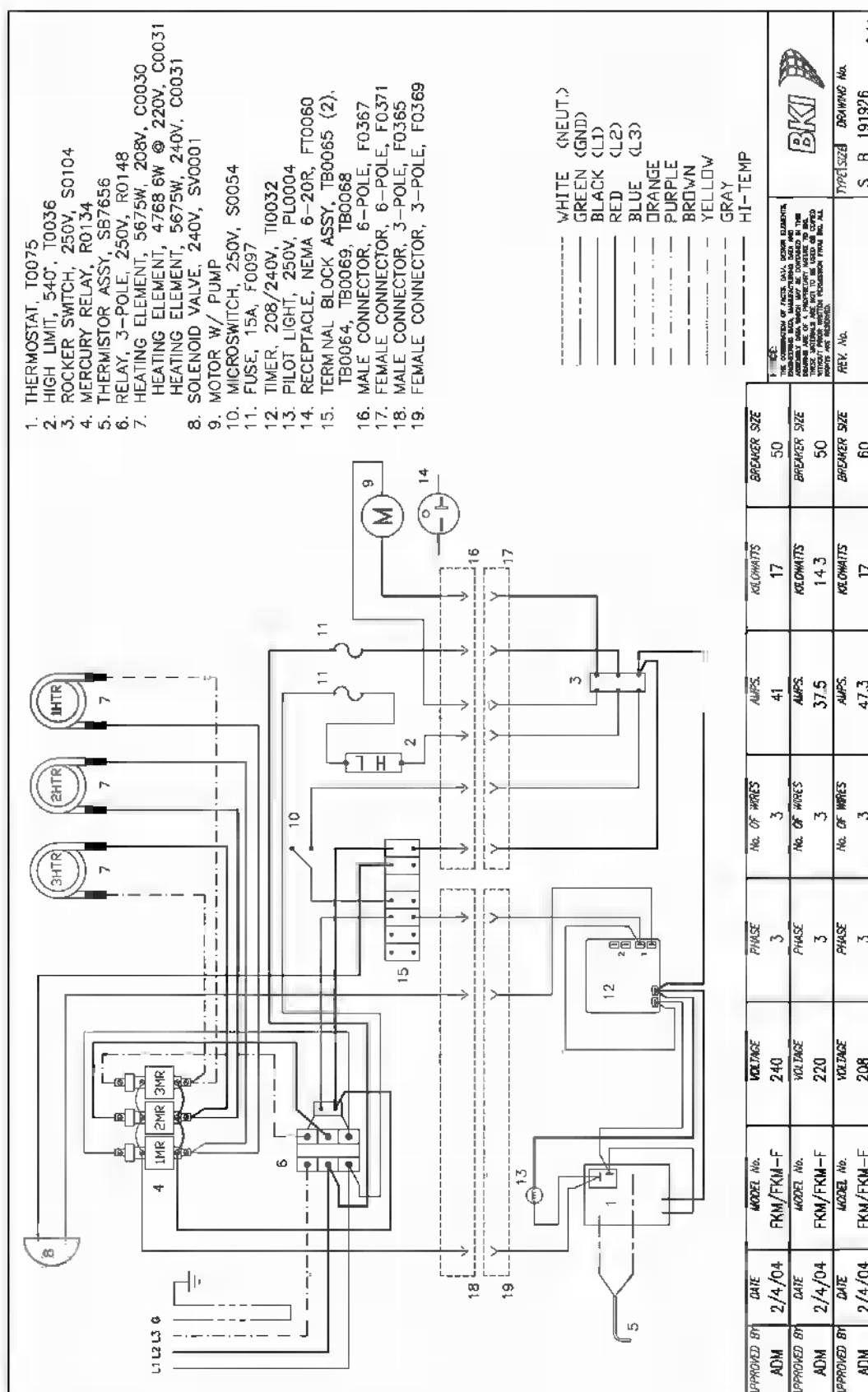


Figure 15. Domestic FKM & FKM-F 208V/220V/240V (Sheet 3 of 4)

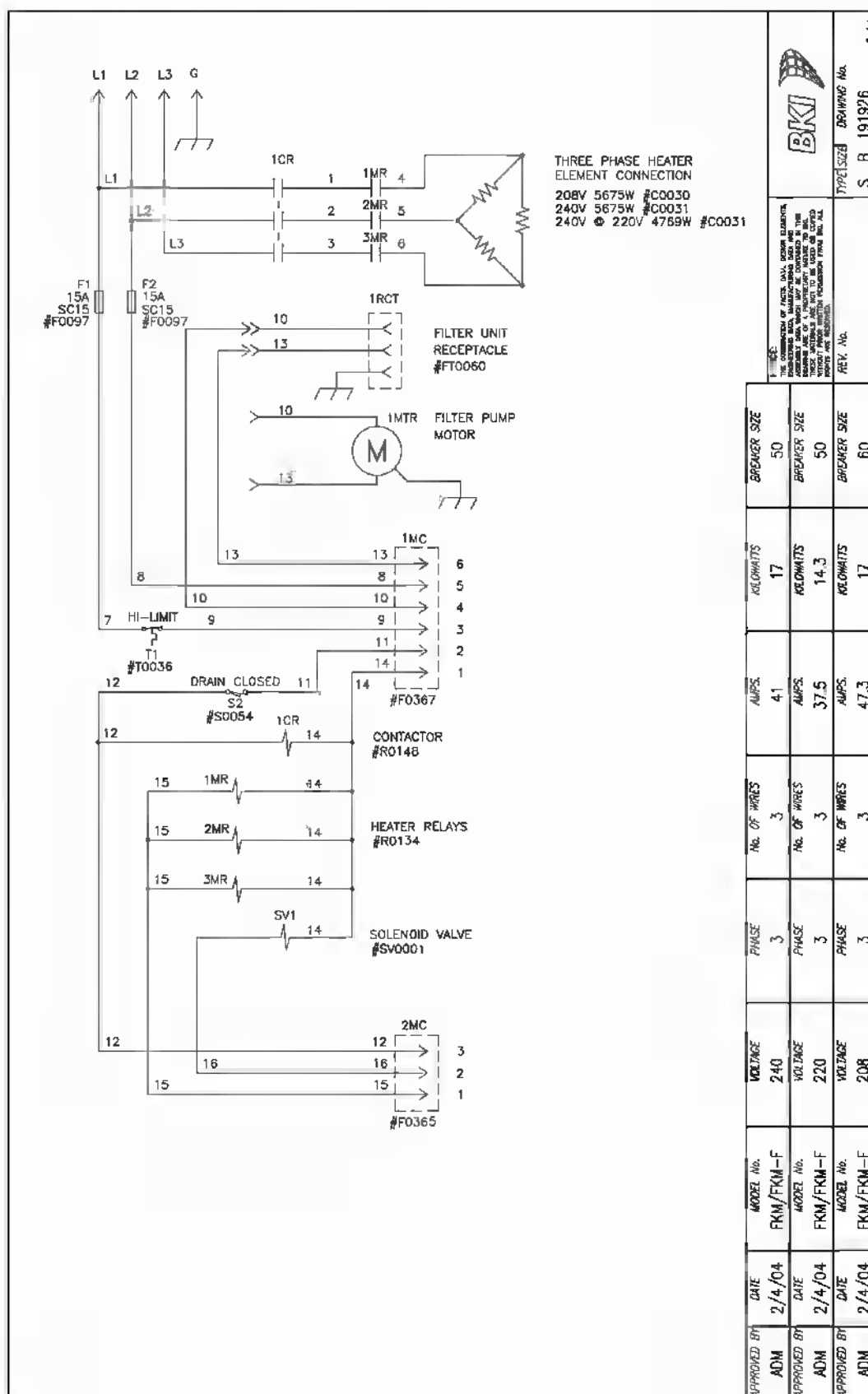


Figure 15. Domestic FKM & FKM-F 208V/220V/240V (Sheet 4 of 4)

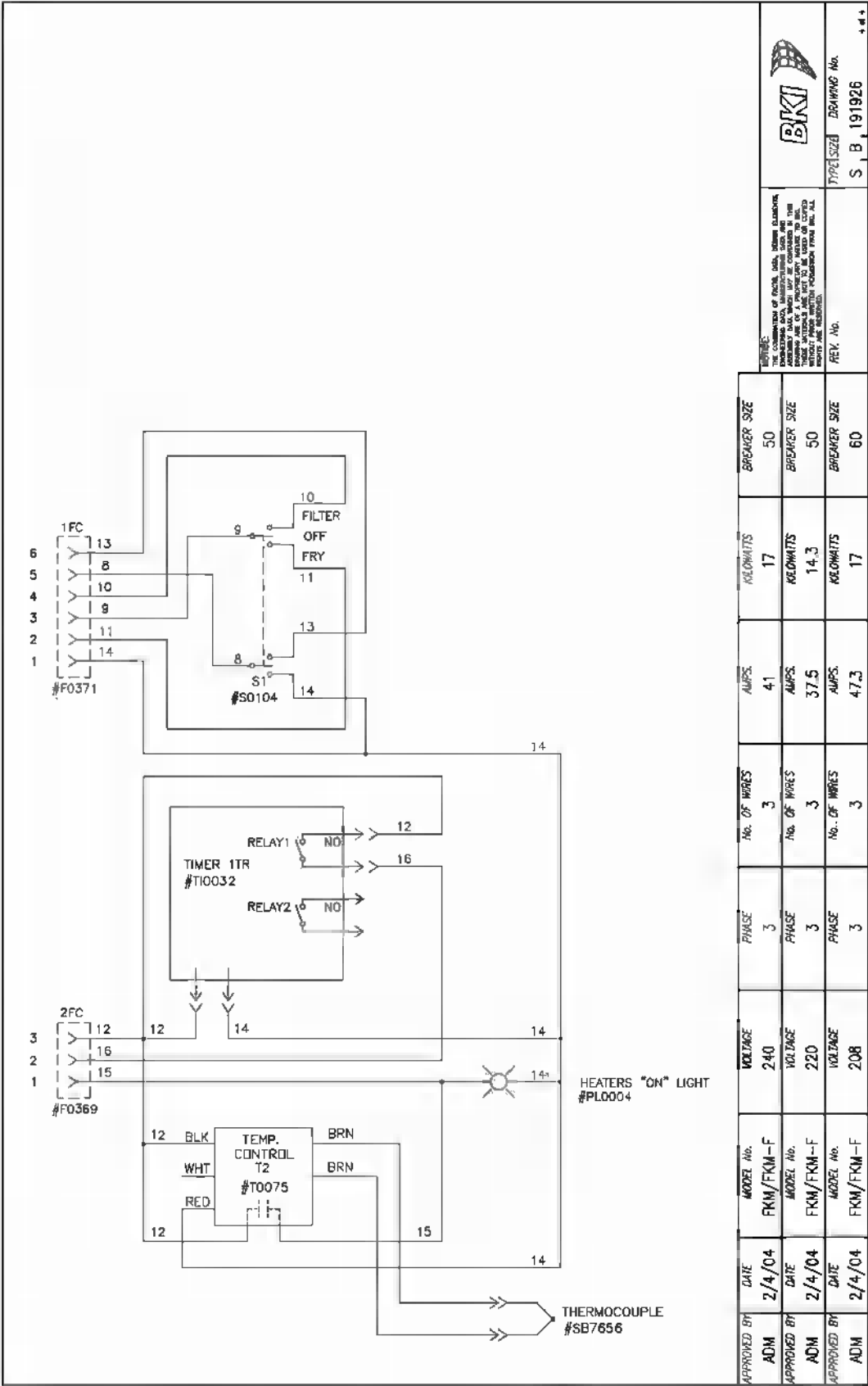


Figure 16. European FKM & FKM-F 220V/380V, 230V/400V, 240V/415V (Sheet 1 of 4)

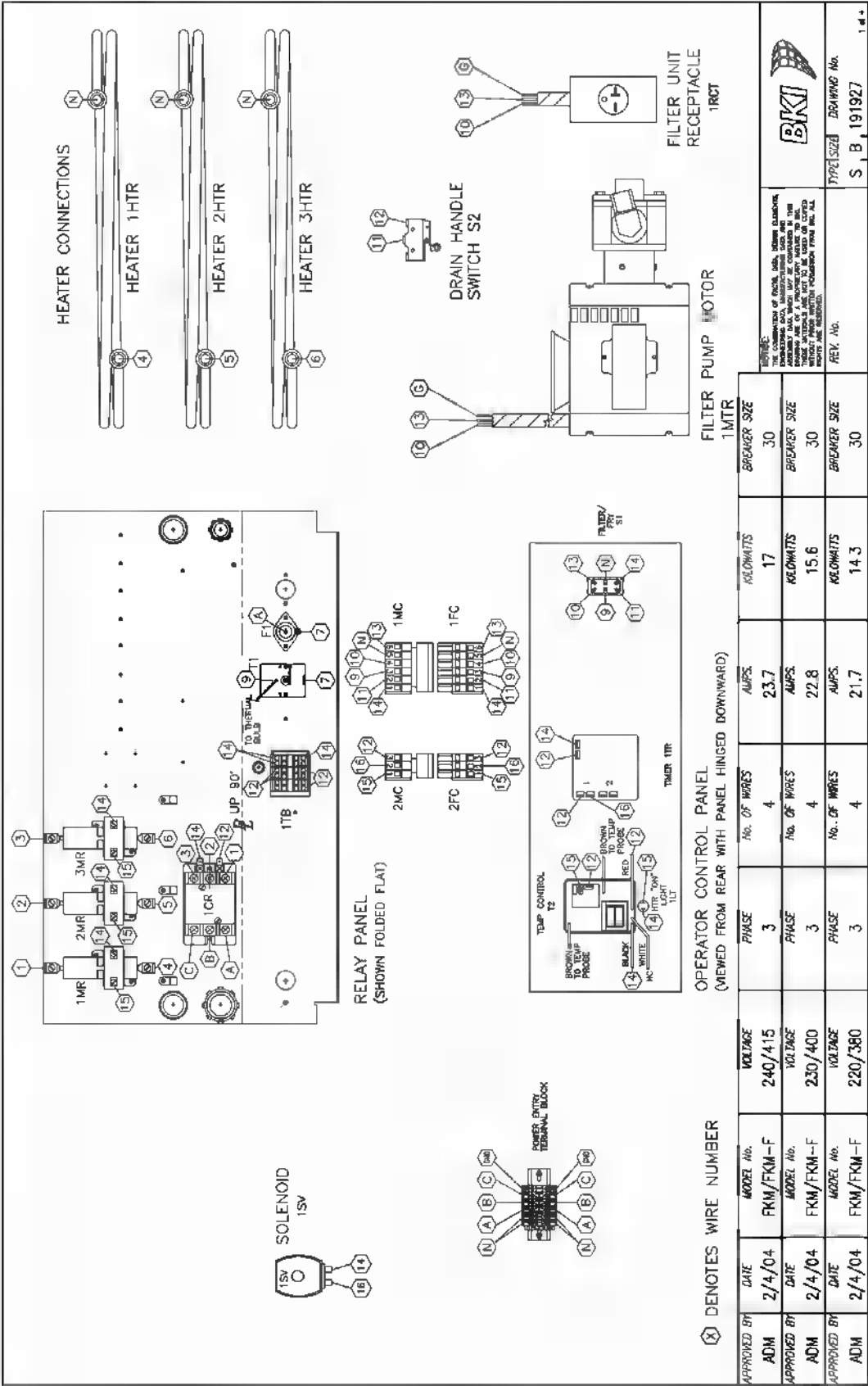


Figure 16. European FKM & FKM-F 220V/380V, 230V/400V, 240V/415V (Sheet 2 of 4)

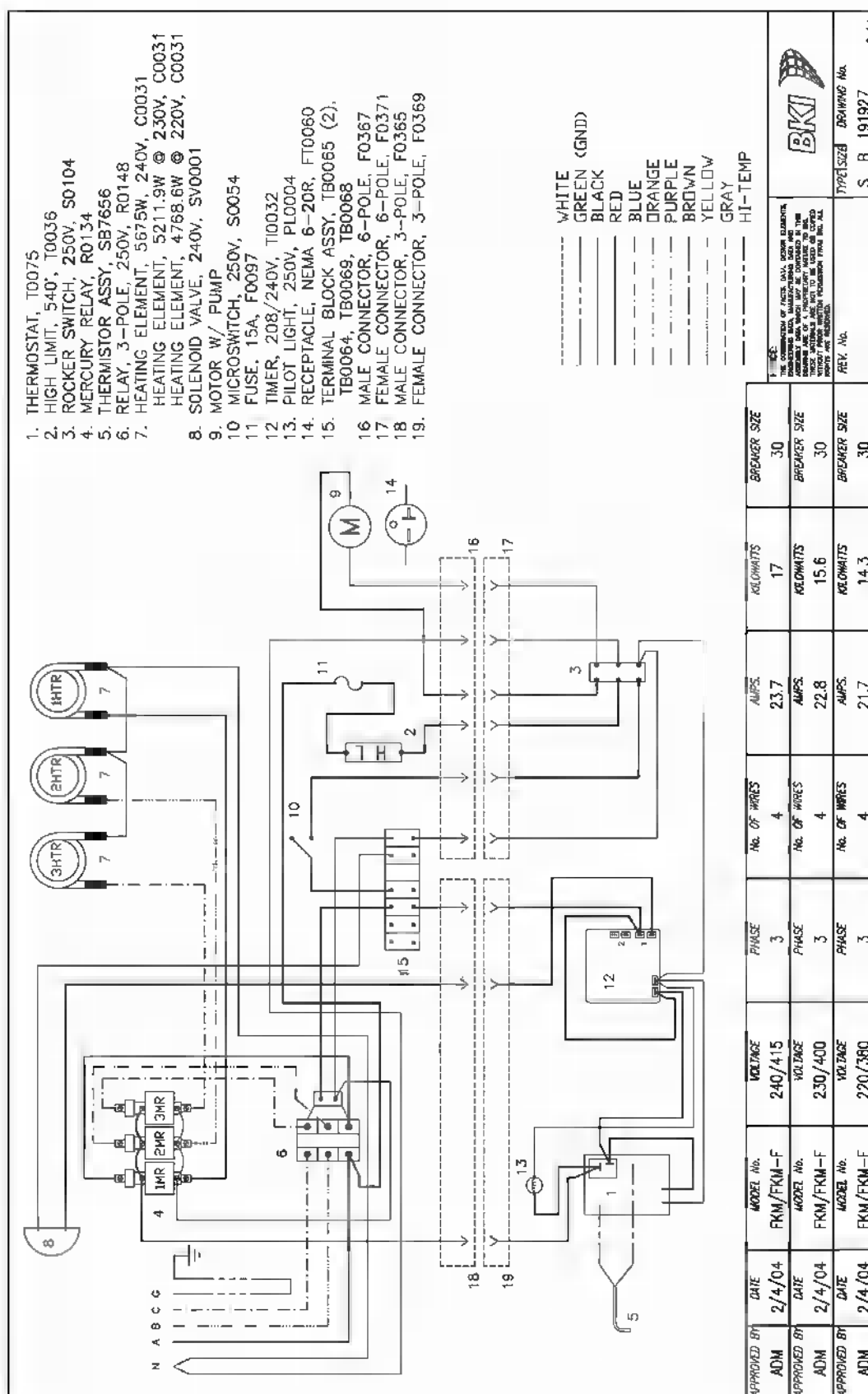


Figure 16. European FKM & FKM-F 220V/380V, 230V/400V, 240V/415V (Sheet 3 of 4)

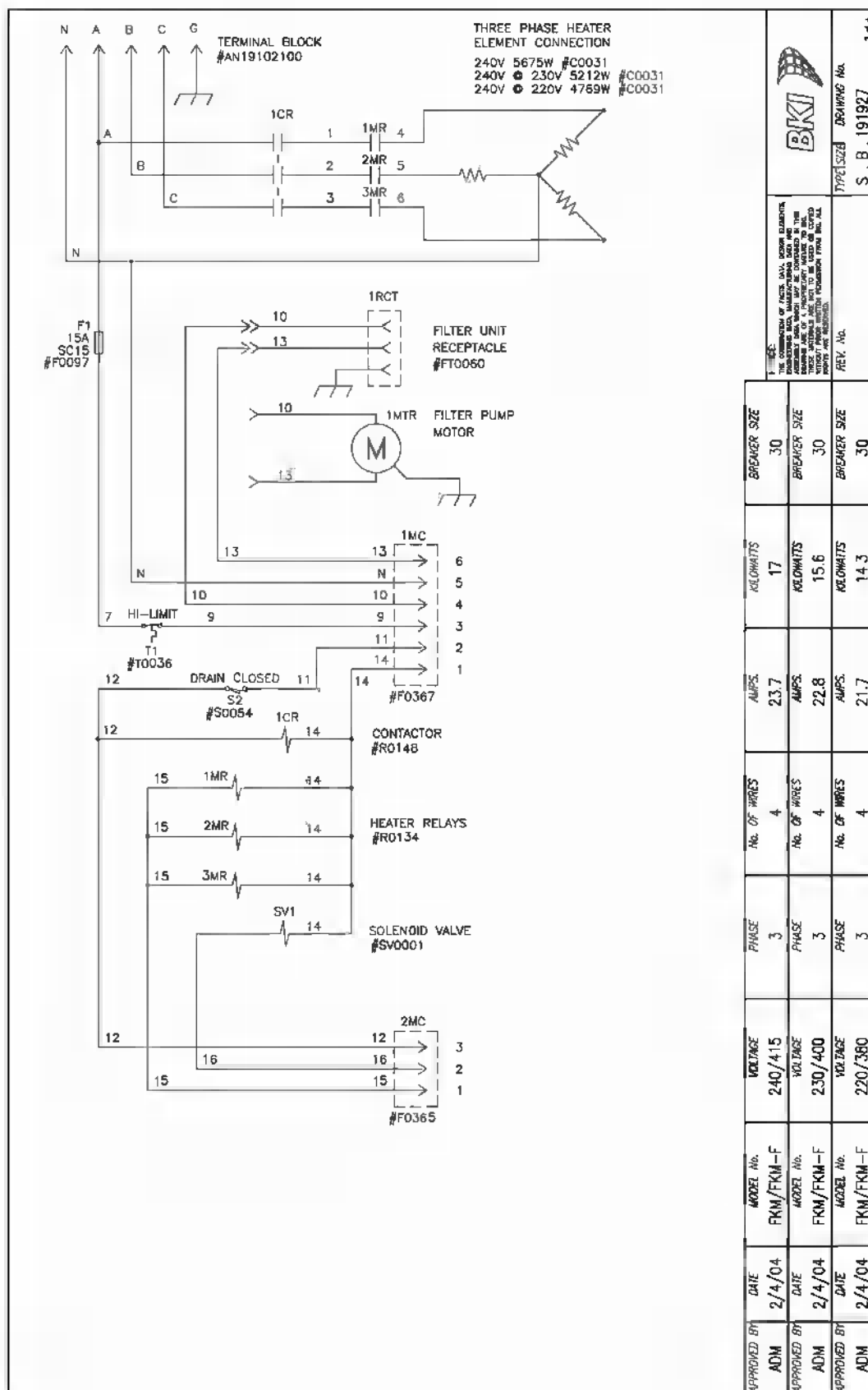


Figure 16. European FKM & FKM-F 220V/380V, 230V/400V, 240V/415V (Sheet 4 of 4)

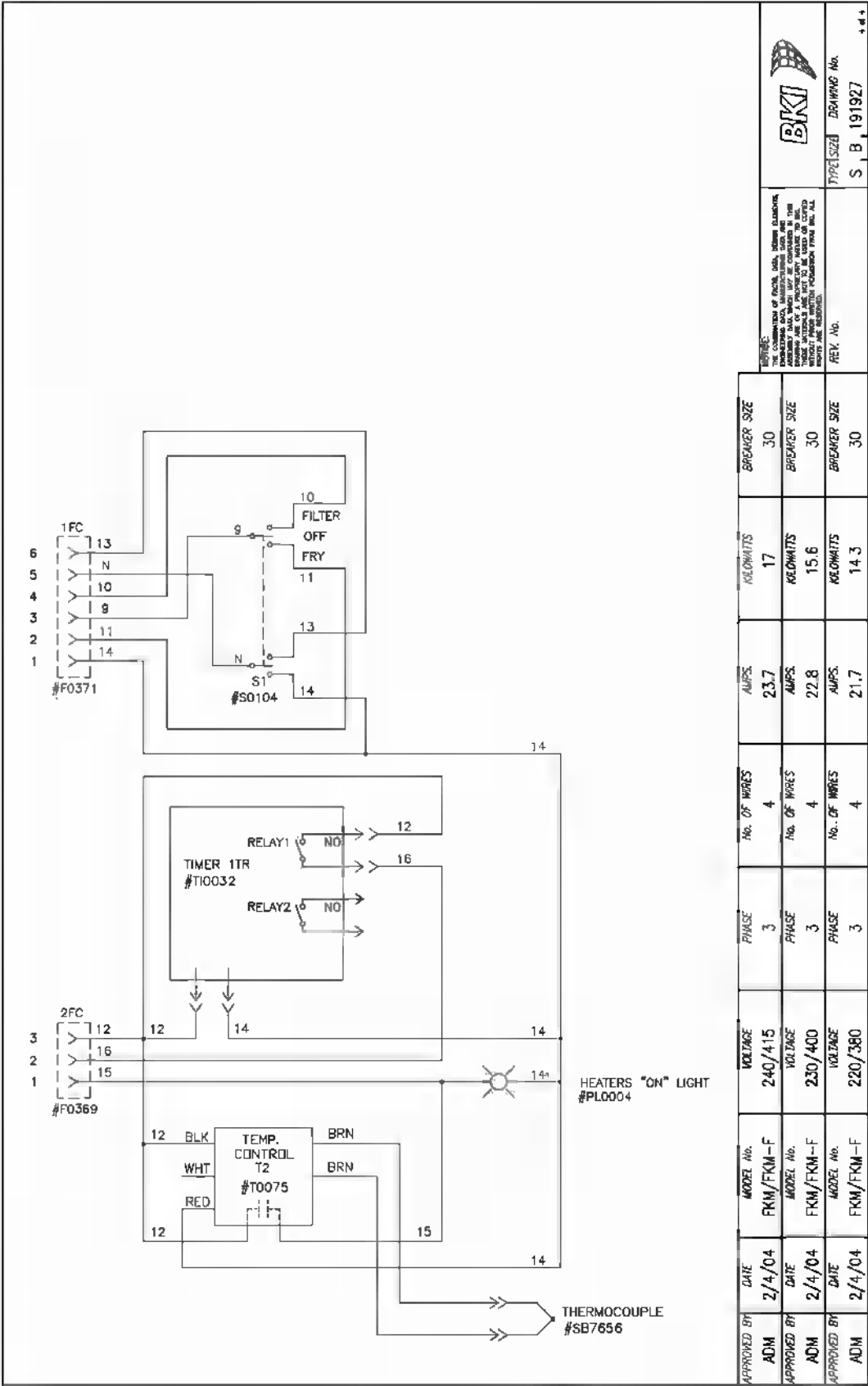


Figure 17. FKM-FC 208V/220V/240V (Sheet 1 of 4)

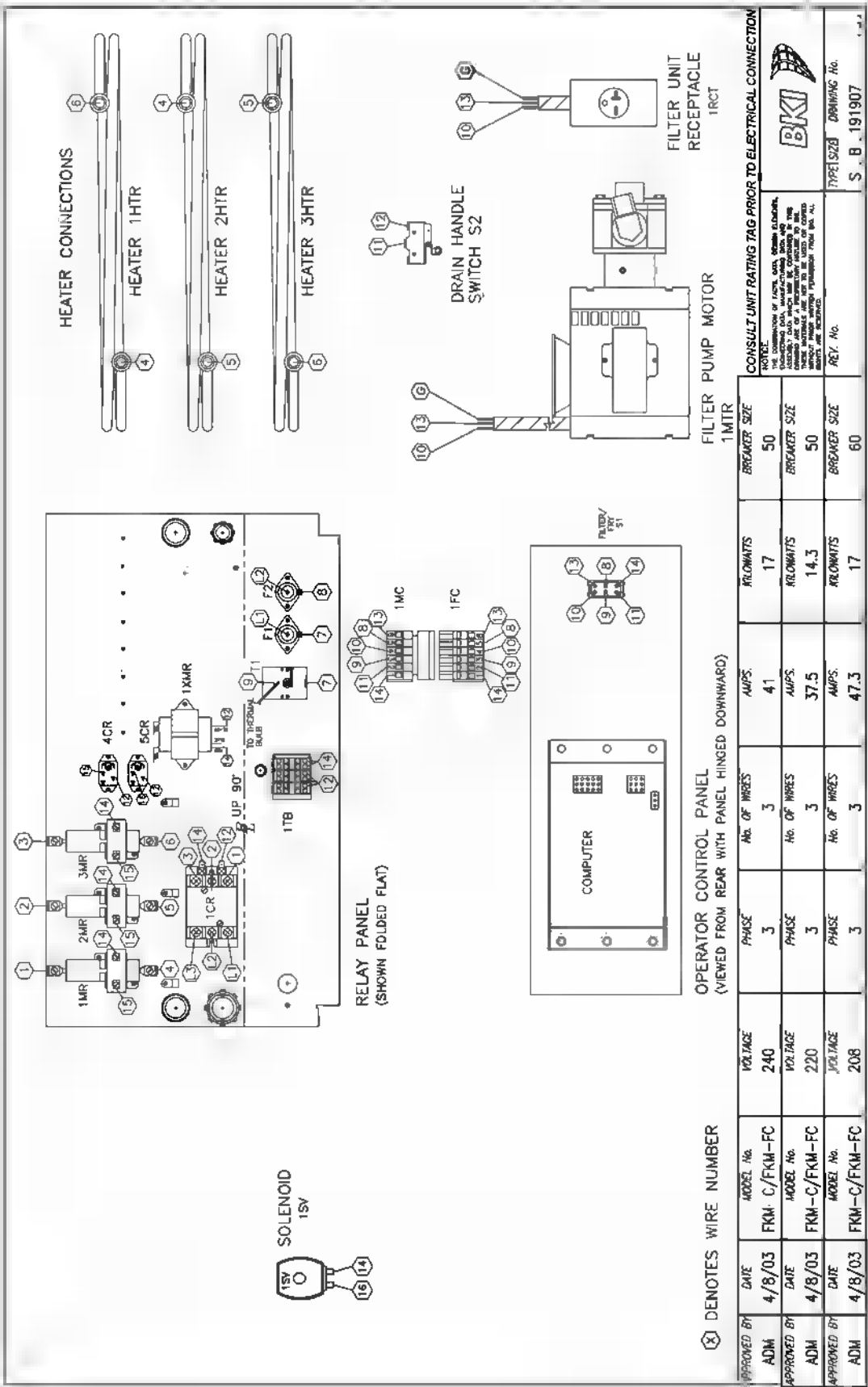


Figure 17. FKM-FC 208V/220V/240V (Sheet 2 of 4)

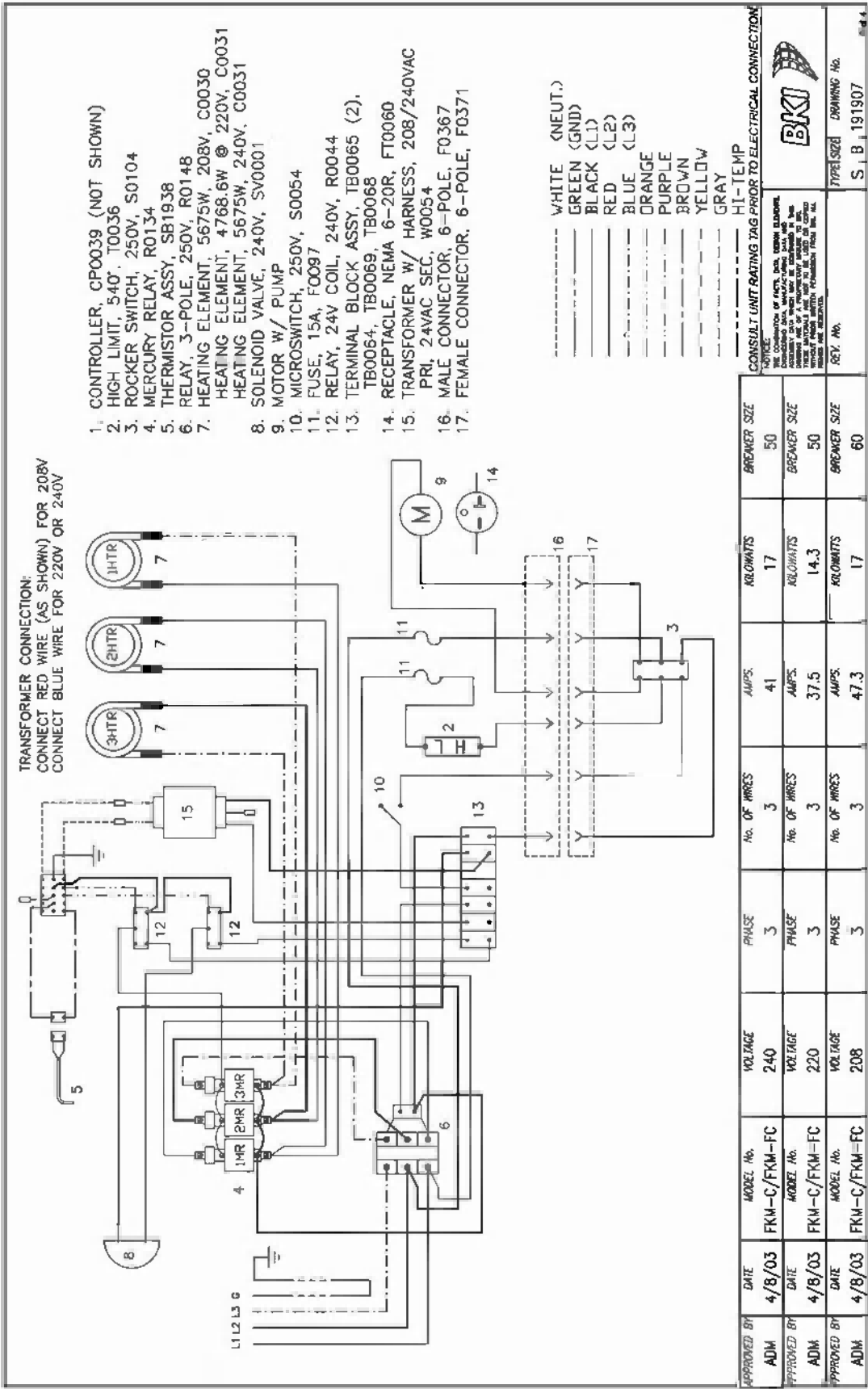


Figure 17. FKM-FC 208V/220V/240V (Sheet 3 of 4)

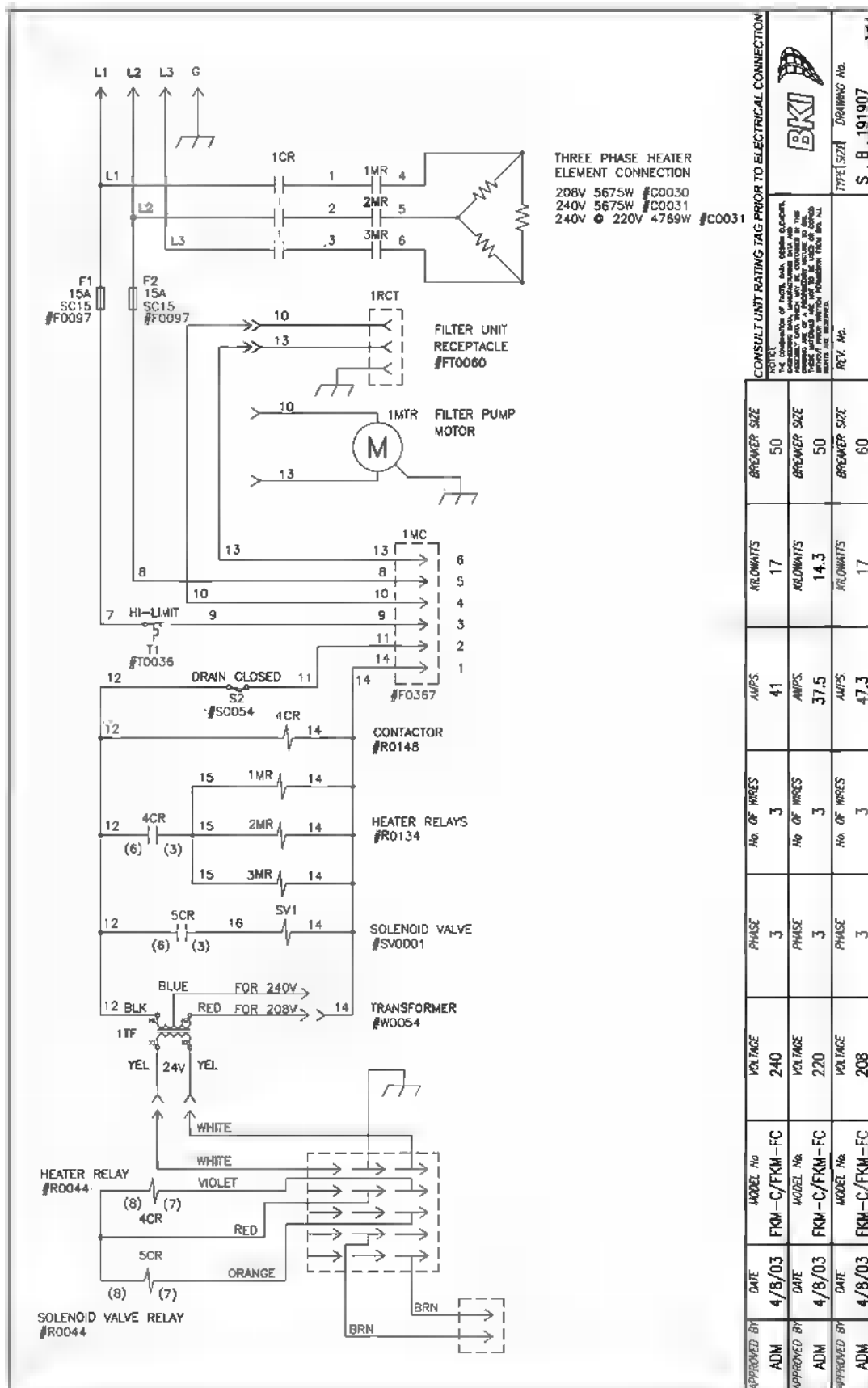


Figure 17. FKM-FC 208V/220V/240V (Sheet 4 of 4)

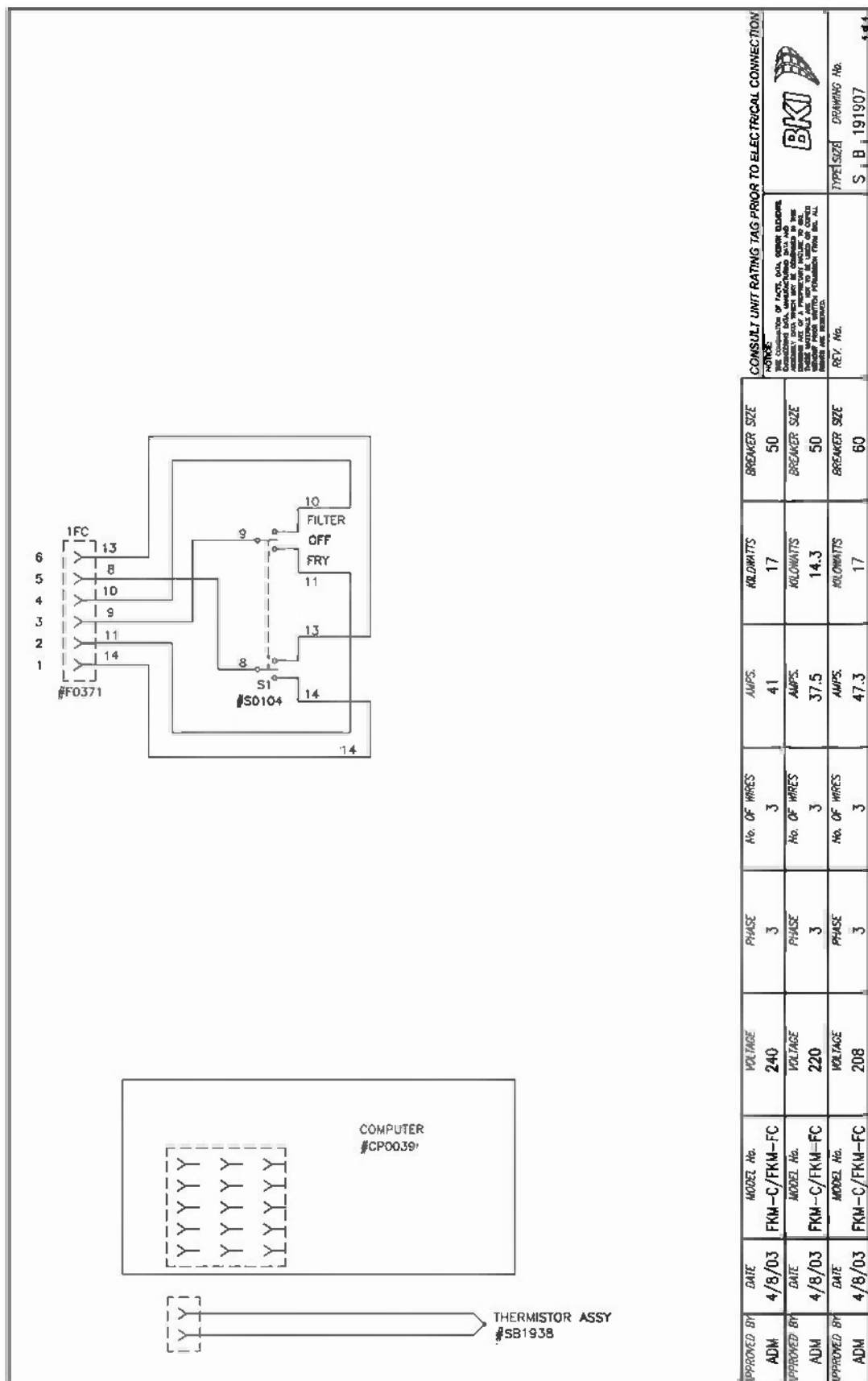


Figure 18. FKM-FC 220V/380V, 230V/400V, 240V/415V (Sheet 1 of 4)

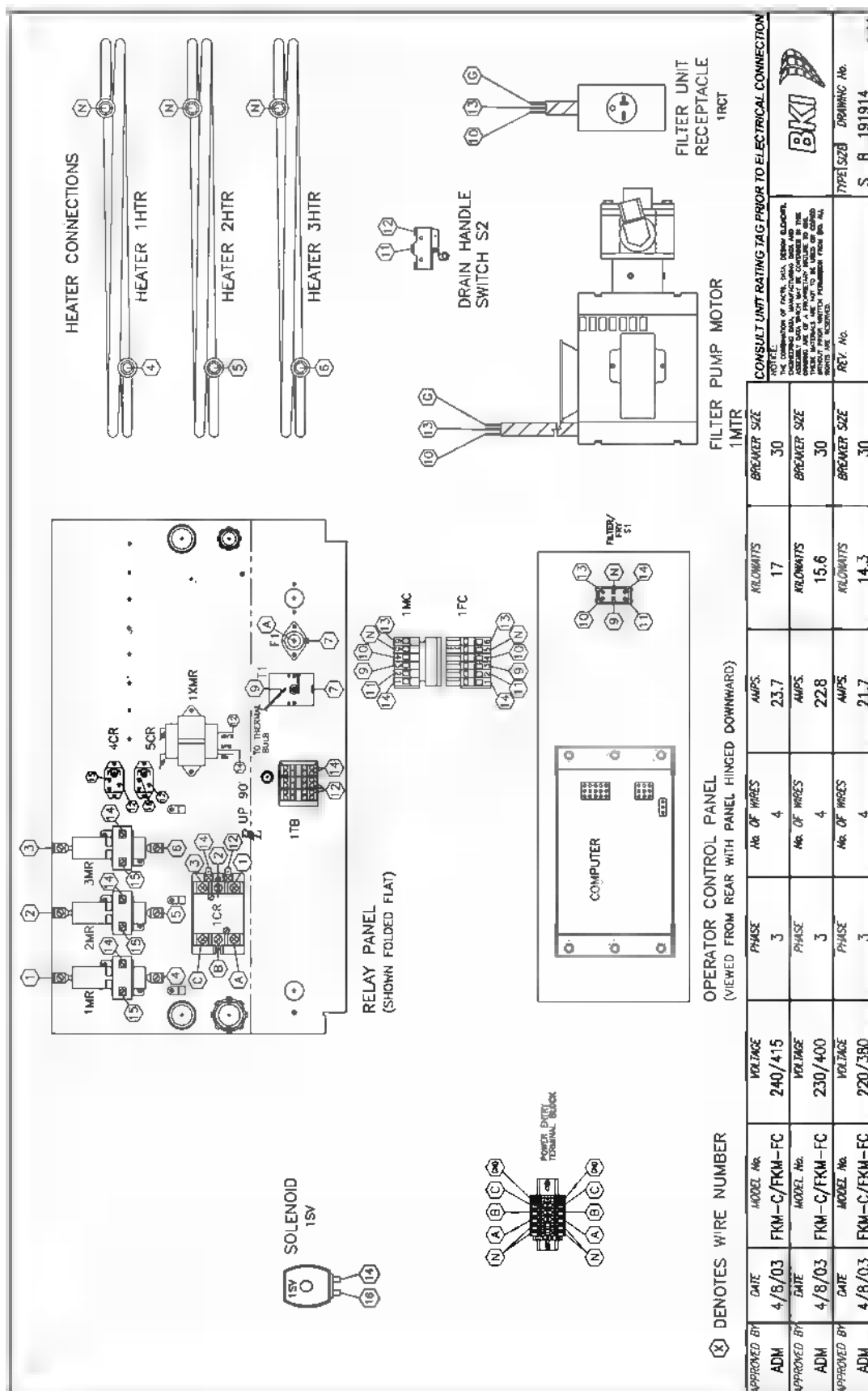


Figure 18. FKM-FC 220V/380V, 230V/400V, 240V/415V (Sheet 2 of 4)

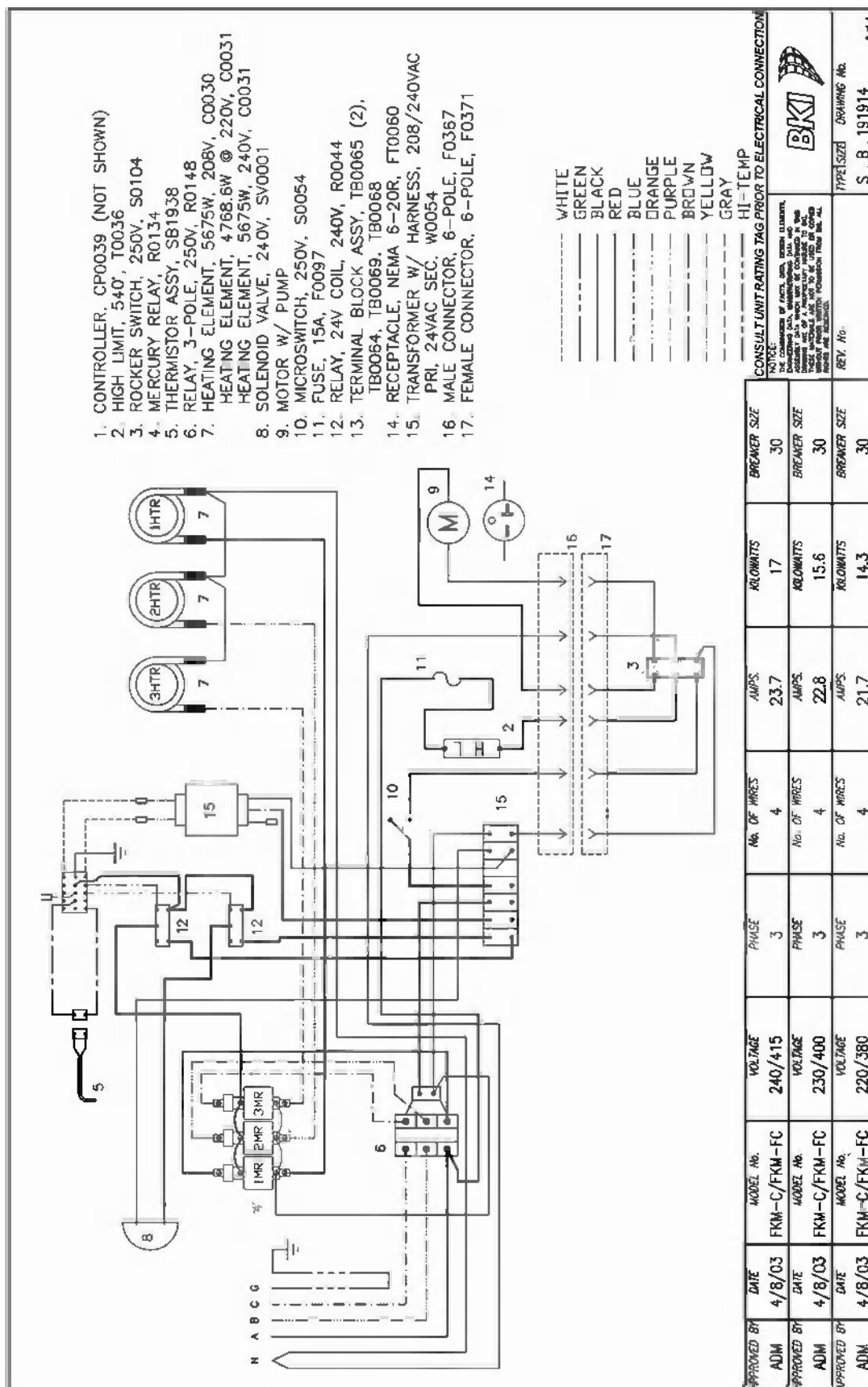


Figure 18. FKM-FC 220V/380V, 230V/400V, 240V/415V (Sheet 3 of 4)

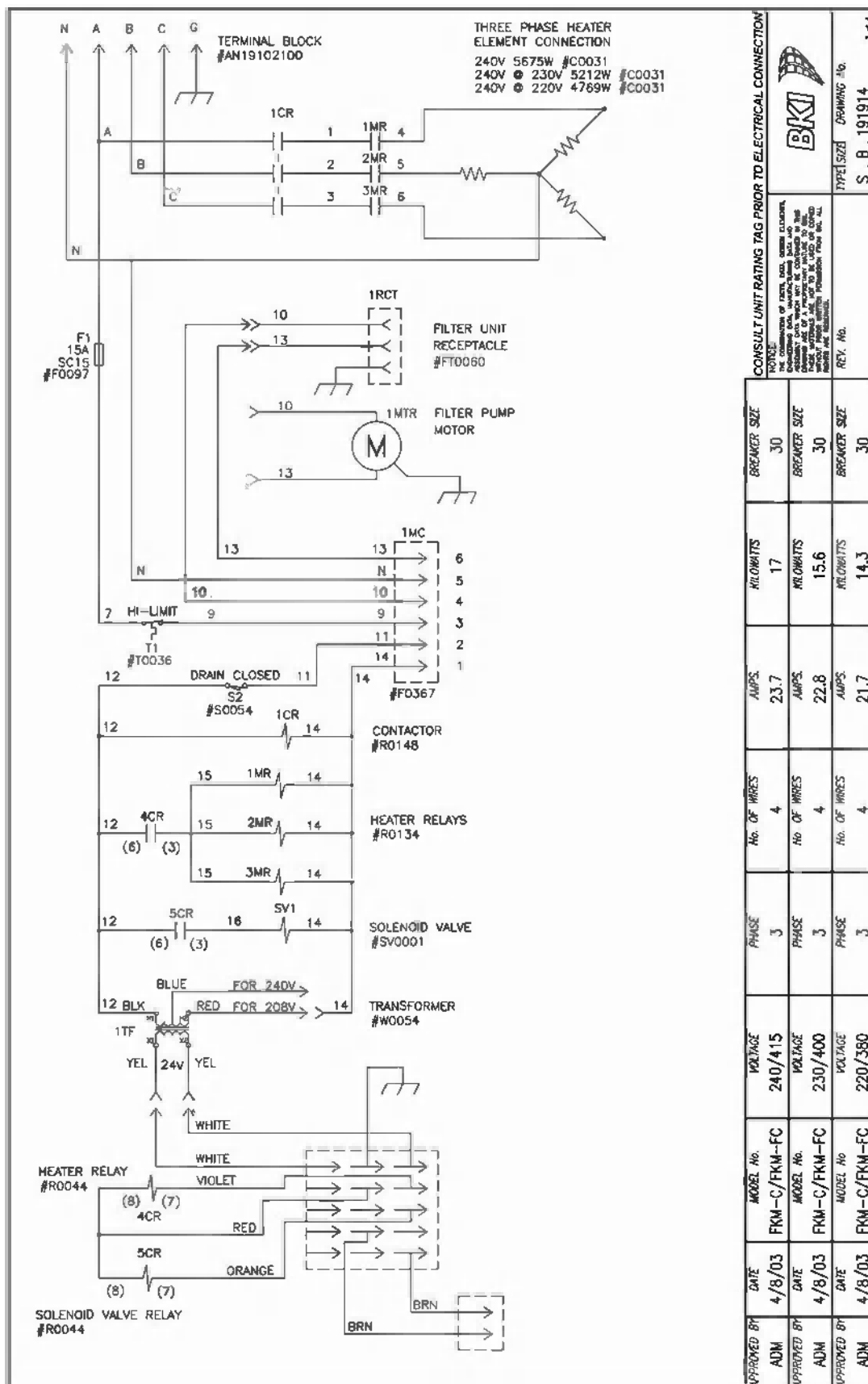
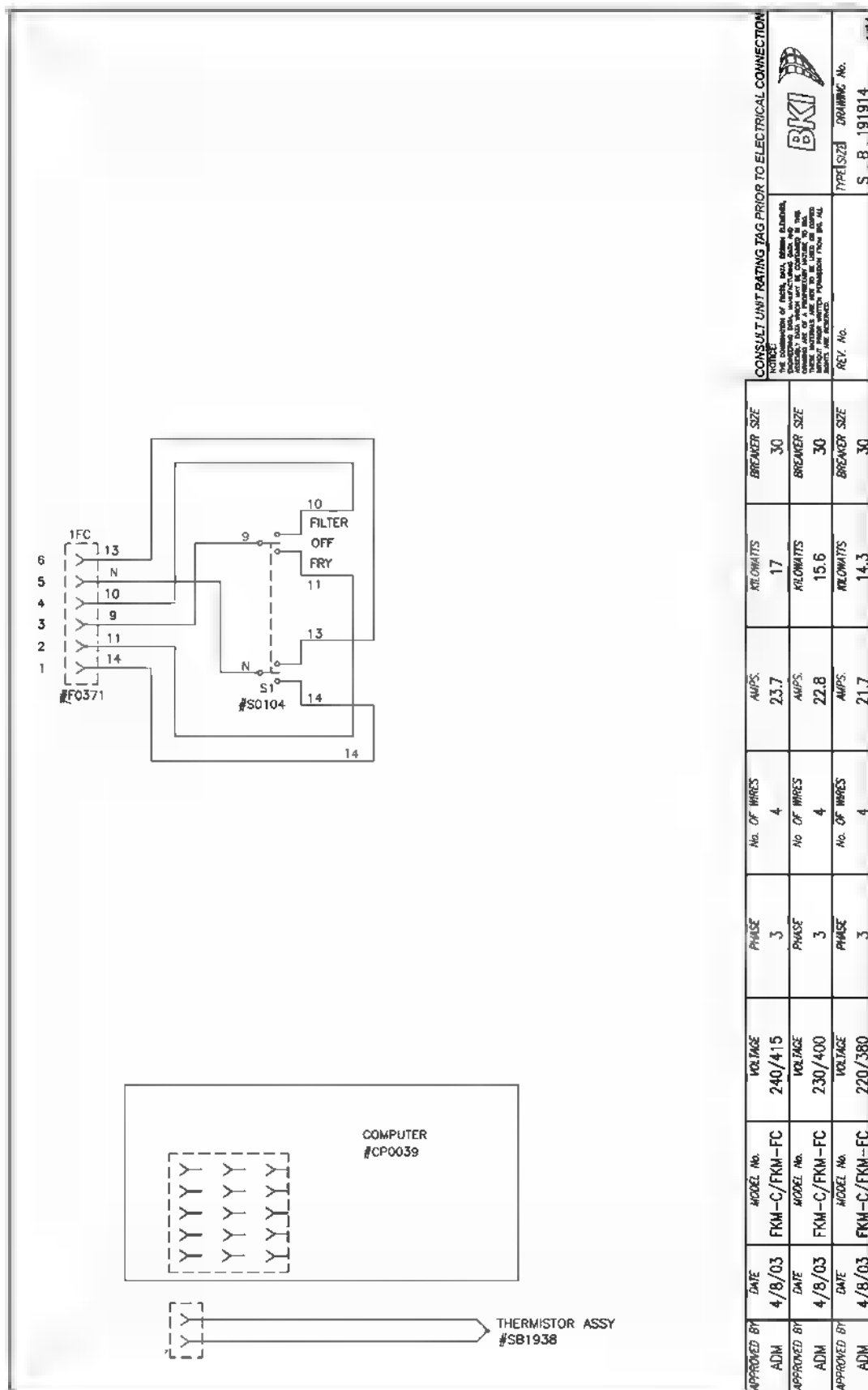


Figure 18. FKM-FC 220V/380V, 230V/400V, 240V/415V (Sheet 4 of 4)





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